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THE
Archives of Dentistry.

A MONTHLY RECORD OF DENTAL SCIENCE AND ART.

VOL. IV., No. I.] JANUARY, 1887. [NEW SERIES.

ORIGINAL ARTICLES.

"Of all the arts in which the wise excel,
Nature's chief masterpiece is writing well."

A PLEA FOR DENTAL SOCIETIES AND PRACTICAL
EDUCATION FOR THE DENTIST.

The Substance of the Inaugural Address read before the Manchester, (Eng), Odontological Society by the President, Dr. Parsons Shaw.

Nothing has a right to live without it performs some usefulness. The moment an animal, or a plant, or any part of either, ceases to perform some useful function, although it may linger for a time, it has already got its death warrant. The parasitical and pauper spirit is not an element of life, but one of death. On the other hand, what defies the ravages of time must have some useful work to perform, which can be done by nothing else. There is no place in political, moral, or material life, where we can rest and be thankful; but a stern necessity, which is as unalterable as the laws of the Medes and the Persians obliges us to be up and doing. Indeed, it is the eternal law that the idle and the useless must go the wall, however much

the idle and the useless may deplore such a hard fate, in spite of a poor's law which provides food and clothing for vagabond's whether they work or not, the multiplicity of charities, the societies for the preservation of the aborigines of the countries where industrious people are pouring in, who can live in comfort on a hundredth part of the land required to keep one savage, and the frantic efforts of men to provide fortunes for their children to support them in that idleness which the ignorant and vulgar regard as the distinctive feature of gentility. Now, these eternal laws which govern all things are especially adapted to dental societies. Indeed, no such organization has a right even to be born, much less to live, unless it is intended to perform, and is capable of performing, some real usefulness to the dental profession and the public; and has no right to live a day longer than it fulfills its mission. I think that as a purely scientific dental society is the only medium through which a large amount of necessary work can be accomplished, its right to live is self-evident. What we want, and must have, if we are to make progress, is a society whose meetings we can easily attend, and is composed of members tolerably familiar with each other, so that the every day matters connected with the profession can be freely discussed; for it is just these little matters which are so apt to be neglected (because they are thought to be trivial, although they are of the very first importance) that should most engage our attention. Most of us know the old proverb, "He that regardeth little things, little by little shall he rise, but he that despiseth little things, little by little shall he fall." A local dental society is, therefore, an absolute necessity in every commercial centre, where it can be easy of access to a fair number of dentists. In these societies men will not only come together to be instructed, but in them they will learn how to instruct others. A great many people labor under the mistaken notion that the quiet and humble members of a profession can be of no use in the dissemination of knowledge, but my experience does not bear out that view. He who greatly distrusts his own powers, is just the man, because of this distrust, to have made an effort to improve upon his as-

sumed deficiency, and can, therefore, tell you something worth knowing. On the other hand, the man who thinks he has a prescriptive right to be always first, is usually the one who should play the poodle dog in the procession, and bring up the rear. Nor is it my experience that the men who occupy the best positions know the most; for it is certain that many men, deplorably ignorant of dentistry, have large practices, and hold what position they have in the profession more from some good luck than from their knowledge or skill. While I have stood aghast at the specimens of so-called dentistry which have been shown me as the work of men with large practices in London and elsewhere, I have often admired the work of the late Mr. Patrick, of Bolton, and other unassuming gentlemen. Yet, although one of the very best dentists of his day, how far beyond Bolton did the fame of Mr. Patrick extend? A certain set of individuals, because their fathers were able to pay a schoolmaster to birch into their brains a modicum of that parrotism which too frequently passes for education, are forever assuming that they are the men of light and learning, and in consequence, have an undoubted right to all the best positions, although a great portion of what they have been taught was held only just long enough to pass some prescribed examination. These men labor under the delusion that passing through a certain curriculum gave them knowledge, trained their minds, taught them how to think, and made them into "gentlemen." But the experience of daily life does not sustain their estimate of themselves. So far from the system of cram, which is the delight of the school, being a means for properly training the mind, it merely enlarges the capacity of the external memory, which is its very lowest power, and the region where facts are stored up only for a time. The mind is never properly trained until it has been taught to so thoroughly master a subject that it enters into the internal memory, and there becomes a part of the mental organization. The reasoning power of a child begins with its observation, and will develop by practice, if unchecked. But when cramming has the absolute monopoly in just those years when the reason ought to be developed, not

only does this system of education fail to teach the student how to reason, but it tends to destroy his reasoning powers, by devoting his time and capacities to the mere acquirement of facts, instead of training him in those subjects in which he could use the supreme faculty of his mind. The school, even with its ruts, its classics and its cram, is a necessity, for a time, in our early career; but what it has to learn is that it is but the lowest stepping stone to education, and not its be-all and end-all. A young lady who has received, at the educational establishment of some Miss Pinkerton, what that very "superior" person would call "a finished education," is a lamentable instance of the truth of what I am saying. One great obstacle to a proper education is the silly pretense of the men with a little knowledge of the classics, and next to no knowledge of anything else. To listen to them one would be led to suppose that ever so little knowledge of the classics was not only an education in itself, but that it insured a mental training superior to all else besides. That pompous individual, Sir William Harcourt, once said, in reply to Prof. Huxley, who maintained that the study of science was culture, that a man could not either speak or write the English language correctly without a classical education, in face of the fact that the three great masters of English, Shakespere, Bunyan and Bright, were not classical men. They were masters of English because they knew no other language.¹ An effort has been made to raise the scholastic, as well as other attainments of the dentist, of which I

¹ And I see that an Editor of one of the London dental journals tells us that a classical education is essential to keep us out of a groove. An education which runs from generation to generation as Huxley points out, in a deep and stereotyped groove, is, according to this gentleman, the essential thing to keep us out of a groove. So it might, if it acted upon us like the "goodies" which a pastry cook's apprentice is allowed to eat the first week, but it unfortunately is too apt to destroy the mental stomach for more useful food. Surely we have proof that a little knowledge is a dangerous thing, when men make statements like these, and attempt to attach such importance to the little they know. I thought Sir William Harcourt's absurd dictum could not be excelled; but it seems not. The next thing we may now expect is for a graduate of some woman's college to tell us that a classical education is the only safeguard against love-sickness; and that without it no girl has a right to get married.

most heartily approve. What I deny is the claim that it trains his mind to think, or assists him, except in a very remote degree to become a better dentist. If he is going to rely upon the school to fit him for his profession, he is leaning upon a weak reed. While I urge the highest possible education for the coming dentist, what I oppose is making his scholastic acquirements rather than his practical knowledge of dentistry the test of his right to practice. Provide for the dentist every opportunity for education in every department of art and science upon which he may desire to enter, and give him diplomas which are genuine proofs that he has reached these high standards of learning; but let his license to call himself a dentist depend entirely upon the production of the evidence that his fingers and his eyes have been so educated that he can properly practice dentistry. If we can have in dentistry, at one and the same time, a high standard of scholastic attainment, combined with practical knowledge, it will be all the better for our profession; and I, for one, shall greatly rejoice. But what we are to guard against is the superstition and conceit of the imperfectly educated men, who fancy that, if they do not know much of dentistry, they know a little of something else; and also that spirit of protection which is so loudly condemned, and, at the same time, so largely fostered in this country; for the folds of an anaconda could not sooner crush out the life than these evils. When they have seized a profession, there is always an effort on the part of the least worthy members, (because that they are the first to feel any competition), now that they have secured their license to practice, to keep raising the merely scholastic standards, in order to keep out as many new comers, as possible. This will be fatal to dentistry. Life has its limits, and if the best years of the student is to be taken up with the school, and not the surgery and workshop, then the dentist of the future may shine as a "prig," but he will not be capable of fulfilling his duties.

We hear a good deal from a certain class about the education of a gentleman," as if the school manufactured that article, instead of its being the outcome of the home training of gene-

rations in the practice of courtesy and of virtue. One of those persons once defined, for my edification, a gentleman to be a man who had been taught how a thing should be done, but was in a position to direct some one else to do it. If that definition is correct, it is certain there can never be any gentlemen in dentistry, or dentists among gentlemen; for if the dentist does not do it himself, it will never be done properly. But this definition of a gentlemen, although common enough among those who are not gentlemen, and are more intrusive than intelligent or refined, is both vulgar and inaccurate. In the rush after the acquirement of mere facts, the schools ignore the great fact that cram is not the way to acquire wisdom, which is the legitimate end of all learning. Wisdom has been truly defined as the result of the application of knowledge to some useful end. Therefore, the maxim of "knowledge for the sake of knowledge" is the doctrine of simpletons. Moreover, crude facts merely stowed away in the external memory is not real knowledge (much less wisdom) and will not become such until put into practice and made a part of the life. The Great Master has pointed out that the way to know the truth is to do it, and in that statement, as in many others which we constantly ignore, laid down a fundamental law. There is no reason why we should not hit the proper medium in dental education; but if we are to sacrifice anything, then I say most emphatically, that we had better have unlettered men with proper finger skill (and we have had many splendid dentists whose early education was very limited) than to have unskilled men with nothing better than the superficial training of the school. So far from the school, as generally conducted, training the mind, my observation has been that the men who have the best trained minds have acquired that gift in the hard struggles of life. It is not the school-boy but the apprentice into whose mind it is drilled, day by day, that he must learn to think about his work. Let a man get a wife and children to support, and it will wonderfully sharpen his thinking faculties. And that is just the man who can be most useful to us in our discussions. Nor is it the man who can afford to run out to the depot for every lit-

tle thing he may want, who can do us the most good; but it is the struggling dentist who must exercise his ingenuity and make the little things he wants. If you want to learn something useful in dentistry, find an intelligent man who has but few tools and appliances, but turns out good work. Necessity has made him a trained thinker. It is just these men we want in Dental Societies, if we can induce them to tell us what they have learned while struggling with their work and the grocer's, draper's and schoolmaster's bills. But some one may say, "Ours is not a mechanical trade, which requires no education." I am not contending that dentistry does not require a very high degree of education; but let it be an education which makes a dentist. Now, no greater mistake can be made than to forget, or try to ignore the fact that dentistry is almost wholly mechanical, and that mechanics require a thorough education. We stand or fall by what we really are, and we shall fall into the contempt of all sensible men if we despise any part of our calling. Whatever else a dentist may be, he is essentially, from first to last a mechanic. It is his duty therefore, not only to perfect himself in mechanical skill, but to honor, and not affect to despise the mechanical art. If we pursue the right course, there will be no fear about dentistry being recognized as one of the learned professions, for it takes in as wide a range of study as any. Indeed, if we do our duty, it will be one of the most learned of all the professions. As no man can be a real dentist who is not a good mechanic, so the only way to learn mechanics is by seeing the work done, and then doing it yourself, and a Dental Society is the very medium for showing improved ways by practical demonstrations. Papers on various subjects are very desirable, but I think our chief object should be to show each other better ways of doing practical things. "But," some one may say, as thousands have said before, "why shall I tell any one else what has cost me so much time and money to learn?" I have always observed that the men who talk that way have not so very much to tell. But, admitting that they have a good stock of knowledge, I ask what right has any man to make a monopoly of it? No one can live for himself.

Like all our possessions, knowledge is a trust held for the good of others, but even to the most selfish man who has no moral considerations, there are reasons why we should meet together and tell all we know. In the first place, the telling of it strengthens our knowledge of it: and what is foolish in our views gets exposed in discussion. Again, if I am a member of a society in which there are ninety-nine others who tell all they know to me, and I tell them what I know in return, I get ninety-nine times as much knowledge as I part with. Although it is sickening to hear men talk of knowledge as the privilege of a class, we must not be too severe on them, for it is the remains of a system fast dying out. In a no distant past the cloister and the cell were the chosen homes of learning, and in these obscure places it was dealt out to the favored few; and even yet, throughout Europe, superstition and the spirit of privilege still lingers around the schoolhouse, and it is as troublesome as the ghost of Hamlet's father. It is a modern idea that education should be universal. The result of free education in America has produced one curious result. Instead of houses of learning being in obscure localities, away from the ordinary haunts of men, they are more likely to be set upon a hill to be seen of all the world. This must be one of those subtle outcomes of the subjective influences, which will continue to puzzle men until they learn that *all* the kingdoms are within them, and that it is not the objective and uncontrollable, but the subjective and controllable influences which fashion the destiny of mankind. As we have entered upon an era when higher and broader views of education prevail, a young and rapidly advancing profession like ours should be in the very front rank of modern ideas. We hear a great deal about elevating the profession, and all are agreed as to its importance, the only question being how it is to be done. A gentleman who is the representative of views different to mine upon this question, once stated to me that he did not think that purely scientific dental societies were of much use, but that we required an organization by means of which the public can be instructed that dentistry is not only a profession, but one possessing culture and

other attainments. Such views as these presuppose that we know enough already (a notion that is fatal to all progress) and what is required is to advertise the fact to a dull public that cannot find it out in any other way. I cannot help remarking that these and similar views of the requirements of the dental profession most prevail among those who really know so little of dentistry that they are but poor judges of its needs; and that the men who are so anxious to convince a sceptical public of our many excellencies in this manner, are just those who are so horrified at advertising. The essential spirit of advertising, and what makes it so very objectionable, is that it is employed to proclaim some one's superiority. Now, I cannot see that advertising is any better when done collectively than when done individually. But dentistry does not need advertising, nor bolstering up by trades-union societies. So far from our having arrived at that degree of excellence which justifies our standing upon the house-tops and proclaiming our greatness, we have immense strides to make before we have a right to any such proceedings, and when these strides have been made, there will be no need for proclaiming our superiority, for it will be apparent to all the world. The gentlemen who advocate this instruction of the public, unconsciously reveal their want of faith in themselves and their own position. Any attempt to elevate ourselves in the esteem of the public other than by un-deviating modesty and honest work will only result in our degradation. The profession of dentistry is made up of a certain number of dentists, and the only way of elevating this profession is to elevate its component parts; and the elevation of these parts is the work of each one of these parts. If any gentleman is anxious, therefore, to do his best to elevate the profession, let him begin with himself, and become a better man and a better dentist. And there is no better way to make a start in the right direction than to join a good dental society. It should be understood that to attempt to elevate the few will not answer, for privilege has never bred anything but vulgar pretentiousness. We really cannot much elevate the few above the many; and in spite of all the attempts to create arti-

ficial distinctions, the character of every people will always maintain a pretty general average. It was a wise remark of Hiram Woodruff, the great trainer of American trotting horses, that it was useless to expect one horse to be much better than the average; and if better horses were wanted we must increase the general average to a higher standard. This fact is true in everything. To sum it all up, if we want to elevate our profession we must begin by elevating ourselves; and then do all in our power to assist the humblest member of the profession in his efforts to elevate himself. In this way, (and in this way only) shall we make progress; and as this progress is made, it will be apparent to all whose good opinion is worth having. You may educate the dentist in art as much as you please, and make his examinations as stiff as possible, and you may load him down with titles, yet he can do nothing toward elevating himself or the profession until he understands that all this is but the mere beginning of his future studies, and he resolutely applies himself to the task of acquiring skill at his work. The place where he will gain the greatest amount of that practical knowledge which is necessary to his success will be his own surgery and workshop. After that, his best knowledge will be obtained in the local dental society which he can most frequently attend.

FROM the *Los Angeles Tribune* of the 7th inst., we clip the following regarding the recent meeting of the Southern California dentists:

"Many important questions were discussed, and Dr. J. C. McCoy gave a neat and instructive clinic, showing the Herbst method of filling teeth. * * * The society recommended that Dr. J. C. McCoy be appointed as a member of the State Board of Dental Examiners. This recommendation shows the esteem and confidence the profession has in him."

The above hearty endorsement of our townsman, Dr. McCoy, by his professional brethren, is far greater honor than any office the Governor could bestow.—*Orange Tribune*.

CORRESPONDENCE.

NEW YORK, December 17, 1886.

ITEMS OF SPECIAL AND REGULAR MEETINGS. FIRST DISTRICT DENTAL SOCIETY, PAPERS, CLINICS, ETC.

EDITOR ARCHIVES:—A special meeting of the First District Dental Society was held, according to arrangement on November 19, at the S. S. White Dental Depot, Broadway, corner of Thirty-second Street. The attendance was large, but a number of the representative members were notably absent.

The subject of the paper read by Dr. Norman W. Kingsley was: "Dentistry Not a Specialty of Medicine." Everyone who has heard or read of Dr. Kingsley's productions knows that he shows ability above the average of our profession, and to say that on this occasion he excelled any of his former efforts would be but the truth. Probably no paper that has been presented for the perusal of dentists has aroused greater interest, or possibly more criticism for and against, than this has and will. Dr. Kingsley's paper is in a large sense a *coup d'état*. To say that the paper proves dentistry to be not a specialty of medicine would be very far from the truth, according to the judgment of those who think intelligently upon such subjects. His conclusions are not well founded. This paper had been read for the first time at Boston, and, according to the admission of Dr. Kingsley, had been somewhat revised for this meeting; he claimed that it was so well received at Boston that he took courage to enlarge upon what he had but faintly conceived might come of such a paper. Dentists are well aware that the subject of a double membrane has been of late very much discussed. The question occurred to the writer, at the time and since, whether this subject might not

have been running in his mind also. While the paper ostensibly presented one subject, another seems to have been nicely couched within it. While I am not disposed to give the doctor credit for such a purpose originally, one thing is certainly evident from what has been said from the time of presenting the paper till now, that the outcome of it will be of a very different nature from what seems to have been the purpose in the beginning.

The paper was discussed by Drs. Dwinelle, John B. Rich, and Atkinson. Drs. Rich and Dwinelle were ardent in their endorsement of the paper. Dr. Dwinelle repeated his familiar phrase, that "Again the Fullness of Time Had Come." Just what the doctor means by this statement is a matter of some query. Dr. Atkinson commended the paper for its admirable style and arrangement. While he seemed to speak cautiously in reference to his present views of what might be understood by this presentation of Dr. Kingsley, yet he said that if the question to come out of it was whether it were wise to have an International Dental Congress, he would simply say that whatever comes—a dental congress or a medical congress, or both—in view of the course that he has earnestly and ardently pursued for many years, it would be his victory, for this had been his fight always—the elevation of dentistry.

Dr. Dwinelle presented quite an extended set of resolutions, recommending that a committee be appointed to consider, in connection with other similar committees, the propriety of holding at some future time an International Dental Congress. Quite a lively discussion was raised in regard to the authority of the special meeting to pass such resolutions. The resolutions were finally referred to the next regular meeting of the society.

Clinics of this society were held on the 12th inst. at the Ninth Street Depot of the S. S. White Manufacturing Company. They were very interesting, but had somewhat of a stormy day aspect, because of a heavy rain. Among other things of interest presented was the new engine mallet by Dr. Washington Irving Thayer, of Brooklyn, which he has named

the trip-hammer mallet. It is a neat and very smoothly running mallet. The claim is made that it gives almost a *fac simile* of the hand blow. It works very much like the electric mallet, aside from the sharp harshness of the blow. A very excellent instrument is indicated, and it was generally received with favor. We learned from Dr. Thayer that it is to be put upon the market by the New York Manufacturing Company, to go with their new dental engine.

Dr. Watkins, of Montclair, N. J., presented a very neat and ingenious apparatus for cutting a thread on a taper screw, resembling much the ordinary wood screws. It is something that we have long desired.

The regular meeting of the First District Society was held on the evening of December 7, at the Thirty-second Street Depot of the S. S. White Manufacturing Company, there being a good attendance. An interesting paper was read by Dr. Swartout, of Utica, on the preparation of cavities and his method of filling with sponge gold, and with a new form of instrument (said to be), having a single cross-cut serration, and which he presented as an original device. The doctor showed both in his paper and by his operating that he is a painstaking man; in fact, he is well known as one of our best operators. His first and last love is gold. His paper was illustrated by several drawings. Dr. Dwinelle spoke upon the paper with a great deal of ardor; for, as is well known, he has been devoted to the use of that form of gold, and has produced excellent results.

Dr. J. Edward Line, of Central New York, presented a paper upon the rhythmic character of functional activity in teeth. It was a very nicely prepared paper, and was listened to with great interest. It was a little cornucopia of pearls, but, as Dr. Atkinson remarked, without any string to hang them on. The paper when published will command careful reading, and can but prove a helpful auxiliary of thought in connection with the subjects of interest that are so apparent at the present day to all intelligent and thinking dentists. A vote of thanks was accorded to both gentlemen for their

favours to the society. Dr. Atkinson spoke in a very commendatory manner of Dr. Line's paper, saying it was rich, and yet so indefinite that it would require a great deal of painstaking study to sift out anything like a systematic arrangement of ideas.

At this meeting prolonged discussion was had regarding the adoption of the resolutions above spoken of, looking to the calling of an International Dental Congress. A question was raised as to the validity of the proceedings of the special meeting at which they were introduced. It was made manifest in the discussion that several of the gentlemen who took part in it were in doubt as to the propriety of hastily passing such resolutions—as a whole—and thereby committing the society to the movement without a full understanding of just what was intended. Dr. Frank Abbott was the only one who spoke in decided opposition to the movement. He declared with a great deal of emphasis that he should have nothing to do with the formation of a dental Congress, and gave strong intimation that he was in doubt about the motive that led to the introduction of these resolutions. While he was well aware, as were many others, that the movement on foot in regard to the interests of the dental profession in connection with the proposed Medical Congress was very far from satisfactory to the general body, yet he was disposed to set aside his personal feelings in the matter, and leave these gentlemen to carry out their purposes, believing that in the main the best interests of the profession would be subserved. This was a benevolent conclusion, to say the least. The resolutions were finally laid over to the next meeting. At the close of the meeting it was evident from the conversation of those present that this movement had excited the interest of many. Only here and there a word of opposition was heard. The writer of this article has in a general way listened to the remarks at these meetings and on the street from the time of its inception, and he finds that it is a belief strongly existing in the minds of dentists that such a movement as is proposed, the calling of an International Dental Congress to be held in the City of New

York at some future time, one, two, or three years hence, will afford an opportunity for conference, out of which will ultimately come much of profit to the whole body of dentists. It is proposed to invite all reputable dentists throughout the world to this Dental Congress. This alone will give it popularity; for it is a well known fact, which may be a necessity in the nature of the circumstances, that the International Medical Congress excludes the large majority of dentists. This has aroused a feeling of opposition to this movement among dentists generally. Possibly, this may be from want of a proper understanding of the objects of the Dental Section in the minds of those in charge of it. This second movement certainly will give full opportunity for every dentist to join hands in it.

If the subject of dentistry is to be considered, can it be better considered in all its interests by the few or by the many? Another question is also pertinent. This Medical Congress movement is in the hands of men with M. D. attached to their names; and how many M. D.'s are there in the dental profession? We will venture to say not over five per cent. Consider that we have fifteen thousand dentists in the United States, and say five thousand others in different parts of the world. What proportion of the dental profession is to be represented at this Congress? And are they to consider at this Congress more than an infinitesimal part of the real work that dentists have in their hands? There are questions of great importance to dentists in general that should be considered, and it seems can only be properly considered by a Dental Congress, and which could not in the nature of the circumstances be considered at a Medical Congress. A point strongly made in Dr. Kingsley's paper was that dentists had no standing before the world. It can be emphasized, as it has been before, that they have no social position. A question here naturally arises, that is often and earnestly discussed by some, that is the question of our recognition. What may be for the interest of dentists coming into the profession by future opportunities is one thing; what is for the interest of this

great mass of intelligent, earnest practitioners now on the stage of action, is another phase, and one of some importance. The ugly saying which is so often rung in our ears, "Nothing but a Dentist," or the French phrase, "Lie like a Dentist," ought to be wiped out. It seems that in this Dental Congress movement a grand opportunity will be afforded to impress our importance, from its present standpoint of view, upon the world at large, and to force by our strength of numbers, the subjects presented and the wisdom of their discussion, a recognition that will be equivalent to an endorsement of our own estimate of our services. This question ought to be, and we predict, will be candidly and fairly handled by every dental periodical, and their columns thrown open for the exposition of the various views as to what may promote the best interests of all.

Notice was given by the Chairman of the Executive Committee that arrangements were being made that promised the largest gathering of dentists ever convened. The anniversary of the First District Society occurs on the 17th, 18th, and 19th of January. Twenty-five hundred invitations have been issued, and it is confidently expected that six hundred or seven hundred will respond. Forty clinics are provided for, each one to be by an inventor, who will read a short paper at the clinic explaining his operations and inventions. There will be a paper and discussions on the first day, and on the evening of the third day a grand banquet at five dollars (\$5), open to all, "go as you please." Taking advantage of this extensive gathering, there is to be a large conference relating to the advisability of taking steps for holding an International Dental Congress in New York.

Many resolutions are in the air, indicative of unusual activity in the dental atmosphere, and we predict that there is to be a decided advance movement, outshining anything ever attempted before, and this to be developed during the next two years. It is on the minds of many that some things need checking, and many others stimulating and encouraging. Fraternal feeling can only be generated by these large and en-

thusiastic gatherings. The First District Society is leading the world, *sure*. AN OBSERVER.

P. S. On Thursday, January 20, the evening following the adjournment of the anniversary meeting, the Northern New Jersey Society will hold its monthly meeting at the house of Dr. Watkins, Montclair. Dr. Harlan is announced for a paper. Dr. Watkins is to give a house-and office-warming. He was burnt out some months since. "Nothing like Watkins seen." So say all the boys. There is a happy feature about all the meetings at the doctor's. Everyone comes away with a *smile*.

CHICAGO LETTER.

EDITOR ARCHIVES.—The suit pending between the Illinois State Board of Dental Examiners and the North-Western Dental College, has been decided by the Appellate Court in favor of the college; but the State Board do not intend to submit to the decision of this Court without a further effort to maintain their position, and they have therefore determined to carry the matter to the superior court.

The affair has been a very unfortunate one for all parties concerned. The reputation of the Board for impartial and clear-headed action has very materially suffered in the opinion of the profession and the public generally. The mistake was in allowing the matter to go into court. It might have been settled at one time with no great advantage to the North-Western College, and but little sacrifice of the vanity of the State Board, but the afore-mentioned Board preferred to stand by their decision, for the dignity of so august a body could not be sacrificed.

The North-Western College feels that the action of the State Board in refusing to recognize their diplomas was an entirely unmerited and unjust discrimination; in fact a piece of unreasonable persecution; the whole affair trumped up to promote the interests of the Chicago College of Dental Surgery and, if possible, to annihilate the other.

The College declares it will fight the matter to the bitter end, and if the State Board carries the case to the Superior Court (as they have given notice it is their intention to do) they will immediately commence suit against the Board for \$50,000 damages.

The end evidently is not yet.

Public sympathy has been so far with the College, but unless there is less vindictiveness manifested by certain of the principal stockholders in the institution, against individual members of the State Board, the tide of public sentiment will be likely to turn the other way. But right will prevail.

“ For right is right since God is God,
And right the day must win.”

The Eighteenth Anniversary meeting of the First District Dental Society of New York, has called out quite a large delegation from Chicago, and they will doubtless receive a typical New York welcome, and every attention will be lavished upon them that a large-hearted hospitality and fertile brains can suggest, for their entertainment socially and scientifically.

The “ boys ” left on Friday afternoon, the more sober and dignified ones on Saturday.

Rumor has it the “ boys ” think the brethren of New York and Brooklyn are rather weak in the back over the Kingsley resolutions, and that they have gone down to apply stiffening to the *too pliant* spines.

“ O wad some power the giftie gie us,
To see oursel as others see us!
It wad frae monie a blunder free us
And foolish notion.”

The plaster seems, however, in the opinion of not a few, to be needed upon the backs of the “ boys ” and their followers, for the load that they have been carrying for so many months against such odds, has been heavy and galling. We hope the application can be made while they are assembled in New York, so that when they return home, the sores will have been healed and harmony restored. The war that they have waged

against the Section in the International Medical Congress has been sharp and bitter, but a losing game from the start, and, like Saul of old, they have found it hard "to kick against the pricks." We hope and trust that the journey to Damascus, which was commenced by "breathing out threatenings and slaughter," may terminate as with Saul in the conversion to the truth.

The worthy president of the Chicago Dental Society recently took exceptions—through the columns of the *Chicago Times*—to the action taken by the Chicago Dental Club in reference to the Kingsley resolutions. This action was as follows:

Resolved, That it is the sense of this Society that the matter of an International Dental Congress should be respectfully submitted and referred to the members of the Dental Profession soon to convene as the Dental Section of the International Medical Congress at Washington, D. C." This resolution he thinks was out of place, and that the younger society should have followed the illustrious example of the older one. He attempts to belittle the club and destroy the influence of its action by saying "it is a new society," (consequently of no importance) "the result of a split two years ago in the old society and made up largely of members of this society," etc., all of which, though true, detracts nothing from the influence of the new society.

Members of the Club say this assault was entirely uncalled for and not in good taste, as there is no ill-will existing in the new society against the older one. They, however, claim the right to individual action and propose to maintain it. The reasons stated by members of the Club for the organization of the new society are, that there might be one place where political wire-pulling and intrigue should not be introduced; and the first and most important business should be the discussion of scientific subjects pertaining to the practice of dentistry; that the discussions should be informal, and that every effort should be made to encourage and bring out the young men in the profession. The club already numbers about forty and is made up largely of young men. More anon.

Yours fraternally, DENTATUS.

IMPLANTATION.

BELLEVILLE, ILL., Jan 19, 1887.

MR. EDITOR:—That the two cases of implantation performed by Dr. Wm. J. Younger in St. Louis over two months ago, have been successful there can be no reasonable doubt, as sufficient time has elapsed since the operation to remove them from the period of suppurative inflammation. They are at the present writing in a firm healthy condition and cannot be distinguished from the adjoining teeth. It is worthy of record that neither of these two cases of implantation has been attended with much inflammatory action, no more in fact than is usually present in adhesive inflammation, and what little did exist was confined to the site of the operation and not at all diffusive in character.

The first foster tooth, a left lateral incisor, was implanted in the mouth of a lady at the office of Dr. H. J. McKellops on the 13th day of November, 1886. The second one, the following week, a right second bicuspid at the site formerly occupied by a left first bicuspid for a lady in the employ of Dr. John G. Harper. In both cases artificial cells were made in the cicatrized alveolus to receive them. The uniform success of Dr. Younger in the operation of implantation is remarkable for several reasons:

1. The operation of transplantation, replantation and implantation, has been practised at intervals for many years, and as often abandoned, owing to the unfavorable results obtained from the operation. (See page 216 Pathology of the Teeth, by Carl Wedl, M. D.; Lindsay & Blakiston, 1872.)

2. The unfavorable results following the operation were without a doubt produced by a neglect to properly prepare the foster tooth for either implanting, replanting or transplanting; the tooth was inserted with a dead pulp which sooner or later caused disturbance.

3. It is remarkable that Dr. Younger should modestly give all the credit to the preserving power of nature, by endowing the periodontal membrane with a vitality little short of immor-

tality, seeing that his own ingenuity and skill in preparing the tooth and the cell to receive it are such important factors in the success of the operation.

4. Dr. Younger has issued a remarkable pamphlet in which he endeavors to explain the constructive powers of nature, in which he unfortunately involves what is already somewhat obscure, in greater obscurity. One paragraph from the pamphlet will be sufficient:

"If the development of a tooth is followed, it will be seen that no periosteum is employed in the formation of the socket. It is the pressure of the crown, due to the force of growth in the developing tooth, that produces the absorption of bone necessary for its eruption. While the crown is in the alveolar process, there is no attachment to it, and there is certainly no periosteum lining the alveolar wall. When the crown has passed through into the mouth, and the root or roots of the tooth have taken its place in the space formed in the alveolus, its wall is still as minus a periosteum, as when the unsympathetic crown, forced its way through. Now the crown of the tooth is considerably larger than the body and roots, and makes a larger space in its progress than is required by its continuation. Therefore, when the crown has escaped from its osseous imprisonment, there is a space left between the tooth and the alveolar wall. This enables the tooth to assume its required elevation in the mouth, before the deposition of bone fills up the space, and firm attachments take place."

This statement of Dr. Younger is based on the common error that the alveolus is formed before the teeth, and the teeth have to force themselves through the bony tissue; whereas tooth cells, teeth and their alveoli, have their growth and development together, neither one before the other; each tooth brings up its own process.

Marvellous as the laws of life appear to the human intellect, they still are inadequate to cause the human teeth, cased in their hard enamel, to expand and grow as the softer bones do, so a special provision is made to meet the conditions which appear more extraordinary still; a set of small

teeth appears soon after birth, which serve the child until six or seven years old; they are then gradually exuviated (not absorbed) and are as gradually replaced by larger ones, with larger jaws, which remain for life.

It is a well established fact that proliferations of osseous substance are thrown out from the alveoli *vis a tergo* into the empty cell after a tooth has been extracted, filling up the cell; now if this cell were again excavated and a tooth prepared, as Dr. Younger prepares them, and introduced properly into the prepared cell (which under the circumstances would be in an hyperplastic condition) the exuding plastic bone material would undoubtedly embrace the root and hold the tooth fast so long as it was not in a septic condition.

J. J. R. P.

ARSENITE OF POTASSA.

EDITOR ARCHIVES.—Having experienced great satisfaction in the use of a formula for destroying the vitality of the pulps of teeth, I take pleasure in communicating the same to the readers of the ARCHIVES.

The arsenite of potassa is not found in preparation in the shops, but may be prepared in the following manner: Take 12 grs. of caustic potash, 10 grs. of arsenious acid, place in a mortar, and add a few drops of water to assist in reducing the potash and arsenic to a thick creamy paste, then add 10 grs. of sulphate of morphine (or muriate cocaine) and stir for fifteen or twenty minutes to prevent re crystallization. The preparation should be placed in a wide-mouthed bottle and kept well stopped when not in use, with a cork boiled in paraffine.

To apply the preparation, the same care should be observed as with the use of all other corrosives of its nature; the rubber dam should be applied; remove all decay from the cavity that is possible to be removed, and with a suitable instrument apply the paste directly to the exposed pulp in about the same quantity as is used of the ordinary arsenious acid and mor-

phine preparation; cover with a small pad of cotton or blotting-paper and seal the cavity with the gutta-percha and wax composition (which is prepared by incorporating merely enough wax with the gutta-percha to render it non-elastic).

The arsenite of potassa may be applied to the pulp of an aching tooth, it matters not how great the congestion may be in the pulp, in from three to twelve hours the pulp may be entirely removed. If the dressing be undisturbed for ten or twelve days, most frequently no remains of the pulp will be found save a soapy condition of the chamber and root canals rendering the subsequent cleansing a very easy matter.

The arsenite of potassa is especially recommended for its prompt and certain action to destroy pulps, particularly in the conditions in which pulps are found, and where pulp-paste heretofore used, rendered the attempt a matter of great uncertainty and frequently much suffering to the patient. The arsenite of potash may be in every instance applied to congested pulps at the first visit of the patient, and no greater pain will be experienced than that which caused the visit. This prompt and immediate action of the arsenite of potassa is due to its affinity for the hydrates, fats, and albumen of the pulp tissue.

C. J. TIBBETS, D. D. S.

QUINCY, January 3d, 1887.

A CASE OF REPLANTATION.

EDITOR ARCHIVES.—The interest which has been awakened in the profession on the subject of transplantation, replantation and implantation, by Dr. Younger's recent clinics prompts me to send you the following history of a case in practice.

Walter C., sixteen years of age, while riding on horseback during the afternoon of November 11th last, was thrown from his horse, and, falling upon his face, both of the superior central incisors were forced completely from their sockets, several other teeth loosened, the lips and face badly cut and bruised.

He called at my office the next day bringing the displaced teeth with him. The mesial third of the crown of the right central, extending down three-sixteenths of an inch below the neck and into the pulp cavity, was broken off. I removed the pulps and filled the pulp canals of both teeth with chlorapercha; one through an opening made through the lingual surface of the crown, the other through the opening made by the fracture. The left central I kept wrapped in a moist cloth while I restored the broken tooth to its former shape with gold.

I then placed the teeth in a solution of bi-chloride of mercury, one part to one thousand, and after removing the clots from the sockets and wiping out with the above solution, returned the teeth to their former position in the jaw.

The teeth were held in place by means of a strip of rubber dam, about an inch wide, which was fastened to the two bicuspids on each side of the mouth in the same manner as when intending to fill these teeth, but stretched so as to form a cup or trough when carried over the cutting edges of the incisors. Tincture of calendula and water was used for two or three days by the patient to wash out his mouth—afterwards listerine and water. I saw the case every day for a week, afterwards at longer intervals and at each visit syringed the teeth and gums with peroxide of hydrogen, then with listerine in water. The retaining rubber was kept on for ten or twelve days. The teeth now are nearly as firm as the other teeth in the mouth, the gums healthy, and only the slightest perceptible soreness. The teeth were out of the mouth for twenty-four hours, and it is now seven weeks since they were replaced.

A. H. FULLER, M. D., D. D. S.

ST. LOUIS, MO.

[There is a feature in the details of the above case to which we ask special attention. We refer to the means adopted for the retention of the replanted teeth. We saw the case with the appliance *in situ* and were struck with its simplicity and perfect adaptation to the end sought. It was easily applied, retained the teeth perfectly at the same time the force was—

not great, permitting the teeth to adapt themselves to the inflamed conditions surrounding them. It also allowed of a thorough cleansing of the parts without disturbing it, or the teeth, by simply raising the free margin of the rubber strip from the lingual and labial surfaces. This is a new feature, and we think superior to any means heretofore used for the retention of the teeth in similar cases. ED.]

LOUISIANA STATE DENTAL ASSOCIATION.

NEW ORLEANS, December, 15, 1886.

EDITOR ARCHIVES:—The annual meeting of the Louisiana State Dental Association will be held in Tulane Hall at New Orleans, La., on the 23d, 24th and 25th of February, 1886.

A cordial invitation is extended to the members of the profession throughout the States to attend.

No efforts will be spared to make our guests comfortable and the meeting interesting and profitable.

An opportunity to witness the *Mardi Gras* festivities will be afforded those who come, at the same time favorable railroad rates may be had.

Mardi Gras takes place the day before meeting.

For further information address,

Yours truly, G. J. FRIEDRICHS,
Chairman Executive Committee.

155 Carondelet St., New Orleans, La.

ACCORDING to *L'Electricien*, M. H. Dunville pledges his scientific reputation to the accuracy of the following observation: "If two glasses of water be placed, one upon the north pole of a powerful magnet, and the other upon the south pole, in four or five minutes the former acquires a slight alkaline reaction, while that on the south pole becomes slightly acid."

SELECTIONS.

THE SANITARY WOOLEN SYSTEM.

BY WM. JEFFERSON GUERNSEY, M. D., PHILADELPHIA.

Several years ago Dr. Ad. Fellger, after returning from a trip abroad, exhibited to me some articles of clothing manufactured under the Jaeger Sanitary Woolen System which he had obtained at Stuttgart, where he also had the pleasure of meeting the inventor. The "feel" of the exquisitely fine fabric created within me an instantaneous craving for just such clothing. Could it be procured in this country, and at a reasonable price? Having long been cognizant of the great superiority of woolen over vegetable clothing, I felt that in this system of using *solely* one hundred per cent. woolen material for day and night wear Dr. Jaeger had "hit my fancy to a T." A few weeks since a circular was sent me from the Jaeger Sanitary Woolen System Company, of 827 and 829 Broadway, New York, which proved to be an American branch of the Stuttgart concern. I accordingly availed myself of a little pleasure trip to Gotham, "taking in" the Jaeger store. The result of my inspection of an hour and a half was an empty pocket (which was too lightly charged) and a determination to some time be possessor of an entire line of the goods.

Although the temperature was rising, I had faith enough in the theory (which I will presently explain) to immediately don my woolen undersuit, and could not now be prevailed upon to part with it.

Let me here refer to the chief points in the Jaeger system. His theory is that as woolen clothing rapidly evaporates and the vegetable (*viz.*, cotton and linen) fabrics retain the exhalations from the body, so must wool *alone* be used in suit-

ing, lining, padding, and even pocketing. He not only believes in the superiority of wool over cotton and linen, but thinks the latter materials positively injurious in preventing this evaporation, which is so necessary to good health, comparing a starched linen shirt (which is also proscribed) to a coat of varnish. An example of this may be easily cited in the rubber overshoe, which becomes almost unbearable after a little walk, from the same cause, though in an exaggerated degree. In order, however, that the hygienic subject may not live entirely out of fashion, and consequently out of the world, the sanitary shirt (over and undershirt in one) is supplied with fine woollen collar and cuff bands, having stud holes for attaching the ordinary collar and cuffs if desired. That part of the shirt that would be exposed to view in the open space of the vest is covered by a wide, ordinarily shaped necktie, also of pure wool. Thus anything unusual in outward appearance is avoided.

Quite a number of patterns of clothing and linings are exhibited for cutting into fashionable shapes, or the purchaser can procure the regulation Jaeger suit, if desired, but one thing must not be lost sight of, whatever the "cut," the coat, pants, vest, and underclothing must be *entirely* of wool, externally and internally.

The shoes are neatly made after the Waukenphast shape, but lined with woollen cloth and ventilated at the heel. The hats are woollen and with a woollen felt band which has a delightful feeling upon the forehead after wearing the customary adhesive plaster, and can be inserted in any hat. The bedding is particularly nice, and includes everything. The sheets and pillow cases are as fine as China silk, and pleasant to even the most delicate skin.

There is a fond notion in the minds of most people that woollen goods are hot, and good only for winter, and even then apt to engender too copious a perspiration. Now let me here state that it is solely with a hope of reaching a few whom Dr. Jaeger will not, that I have been tempted to here defend his theory, namely, that woollen underclothes are hot in summer *because* they are encased in linen or cotton ones, which prevent

the evaporation that would otherwise take place, and they are not warm enough in winter, sometimes for the same reason. If, therefore, the evaporation be permitted to take place uninterruptedly, or unhindered by this "varnish," we have a healthy skin, normal circulation, and consequently sufficient heat to withstand the cold of winter and feel comfortably cool in summer. Vegetable fabrics are more or less good conductors of heat and cold. Wool is a non conductor of both, and thereby insulates the body from atmospheric changes. With such a system of clothing, which is veritably a sanitary one, we may safely, even though our clothing be somewhat damp from rain or perspiration, subject ourselves to an abundance of open air, and with the absence of drug dosing; which Homœopathy forbids, nature may be kind to us in extending our present period of ill health to robust manhood and womanhood far beyond the "expectancy" table of the best regulated life insurance company." Homœopathy does not force and drive but *aids* nature in casting off disease by *coaxing* it to perform its *normal functions*. So does the sanitary woolen system assist in maintaining health by keeping up the functions of nature. Therefore, I say, what Homœopathy is to the sick the Jaeger system is to the well, and as a natural health preserver (consequently a preventive of disease) and an auxiliary in treating the sick, we should urge its general adoption, and do all in our power as scientific physicians to discourage the use of the pernicious vegetable clothing. Feeling conscientious in this matter, I wish the Jaeger firm, who are personally unknown to me, a hearty welcome.

HOMEOPATHIC PHYSICIAN.

MOTORS FOR THE DENTAL ENGINE.

For several years past we have seen and read advertisements of water, gas and electric motors, but up to the present time none of the machines which we have investigated can become universally applicable or valuable in all dental offices. The gas engines are too noisy and bad smelling for use in the op-

erating room. Electric motors are too uncertain, and they always require constant watching, and even then they are liable to a sudden stoppage. Water motors, on the other hand, however valuable they may be, cannot be used in offices located above the third or fourth floor of a tall building. If all dentists were located on the ground floor, or even on the second floor, the water pressure from city water works might suffice in nearly all cases. In many cities and towns where large quantities of soft coal is consumed, this is not practicable on account of the murkiness of the atmosphere. If some inventor would only construct a gas or gasoline engine of from $\frac{1}{4}$ to $\frac{1}{2}$ horsepower, for propelling the dental engine and the laboratory lathe, he could soon make a fortune; or if he will only adapt a water motor to our use, so that we would not have to depend on city pressure, it would be a great boon to those of us who are growing old rapidly, on account of the intense strain which the constant running of the dental engine entails.—*The Dental Review*.

WARPAGE OF PLASTER OF PARIS.

A singular and heretofore unobserved phenomenon in connection with the setting of plaster mixed with plain water is pointed out by Dr. Bowman Macleod of Edinburgh,¹ from which he draws conclusions so practically important concerning its influence in modifying the adaptation of a dental substitute, as well as in other respects, that space is here given to such of his observations as are deemed essential. A block of plaster was cast within a square of two feet, which, on the following day, showed an expansion of five-sixteenths of an inch in length and breadth. "But I found," he says, "that not only had the plaster expanded, but the upper surface was raised; and, on sawing the block through in a diagonal direction, I found that instead of the block lying dead upon the plane be-

¹ Transactions of the Odonto-Chirurgical Society.

neath, it presented a concave surface toward the plane, the highest point of which measured one half inch. This showed first of all, that the plaster had not only expanded, but had done something more than its now greater length and breadth would lead one to suspect; for, in thus taking a concave form, it must have either retracted to an equal extent, or expanded in an irregular manner, causing warpage. Making still further experiments by casting plaster in the ordinary impression cup, I found, invariably, the same result produced, and that the centre portion—the palatine portion—of the cup always presented an open and well defined space between the upper surface of the impression cup and the lower surface of the hardened plaster. This circumstance, therefore, would produce in your model a fault similar to that resulting from the sucking of the waxy or resinous impression materials, and, as you can readily see, would give you a much higher dome than that of the natural arch. Hence the rocking of the plate, which has hitherto been attributed—if my deductions be justified—to every cause but the right one. Continuing my researches, I found that although in the equal surface and depth of the modeling tray, the defect always ran in one direction, yet, on pouring the plaster into irregular molds, such as the impression of the mouth, the position of the point of warpage was not always persistent, but seemed to be controlled by the thickness of the superincumbent layer of plaster, and this led to the conclusion that, while in some instances the defect would determine itself on the palatine ridge in the shape of an exaggerated dome, at other times, and that more frequently, in under dentures, it would express itself in irregular lateral expansion, and consequent misfit upon the posterior portion of the alveolar ridge. Naturally, then, I began to inquire how this defect might be overcome, and I find that by the addition, to the water with which the plaster is mixed, of potash-alum (hitherto used entirely for the purpose of quick setting in impression taking), in the proportion of from three to four ounces to the gallon, you will entirely overcome the irregular expansion and consequent warping which takes place in coarse plaster-of-

Paris as used with water alone. But here you have the two blocks of equal dimensions; one cast with water, and the other with potash-alum water. It requires no explanation on my part to point out the difference between the two. In the one case, the expansion is five-sixteenths of an inch; warpage, one-half inch. In the other, expansion, *nil*; and warpage ditto; and the two surfaces, dead. You have here a series of impression cups of various sizes and shapes, filled with plaster, cast with pure or plain water, and with potash-alum, and which require but to be examined to convince you of the fact of the deadness of plaster-of-Paris when treated with potash-alum, and its behavior under ordinary circumstances. The conclusion I draw from this is, that all plaster, either for impression taking or for models, should be cast with potash-alum, when strict and definite results are to be obtained; and that in the case of gum block work, that opening of the joints—which has hitherto caused so much trouble to practitioners, and, to a great extent, has prevented the more general adoption its other merits might have commanded, and which has drawn out many suggestions as to the best mode of prevention—the opening of the joints may now be entirely prevented by the use of potash-alum for both matrix and model within the flask.’—*Richardson's Mechanical Dentistry*.

CLAUDIUS ASH & SONS, of London, England, manufacturers of dental goods, have established a branch house at No. 30 East 14th street, New York City, Mr. C. A. Sykes, well known to many of the profession in America, is in charge.

This is the largest house manufacturing and dealing in dental supplies, having branch houses in Liverpool, Paris, Manchester, Berlin, Vienna, Hamburgh, Copenhagen and St. Petersburg.

Their locating a branch house in New York is an indication that they are able to pay duties and yet compete with American dealers.

Those who prefer to use certain goods of A. & Sons will gladly welcome them to this country, and rejoice to know that Mr. C. A. Sykes will, in the future, make his home in America

EDITORIAL.

WITH the close of the year 1886 THE ARCHIVES OF DENTISTRY, which for the past three years has been published under the auspices and the direction of an incorporated body of dentists called, "The Dental Journal Association," changed hands, the Association having disposed of its interest to Mr. J. H. Chambers, the publisher, who has placed the editorial management of the journal in our hands. Some of the readers of the ARCHIVES may recognize in us the former editor of the *Missouri Dental Journal*, the parent of the ARCHIVES. When we stepped down and out of the editorial sanctum of the *Missouri Journal* we little thought of ever being induced to resume the duties of the office, but the many pleasant recollections of friendly intercourse and acquaintance with the friends of our old love, prompted us when called, to accept our present position on the ARCHIVES, through which we hope to renew old acquaintances and to make new friends. Custom has made it necessary for an editor on making his first bow before his readers, to introduce himself and his work with an editorial, which affords him an opportunity for calling the attention of his readers to any defects or faults, his keen perception may have led him to detect, in the conduct of the journals of the time; also, for the elucidation and promulgation of any peculiar scheme he may have evolved for remedying these faults.

We have mounted the tripod and accepted the conditions, and now make our first appearance with the customary editorial. Believing however, that our readers are as quick as we to observe

any want that might possibly exist in the dental journalism of to-day, modesty forbids us to say anything on this point. The old friends of the *Missouri Dental Journal* who may remember us, know what to look for in our present work; and we merely say to our new friends and readers that we hope, by honest, faithful and careful attention on our part, with their assistance, to make the ARCHIVES a good medium for the dissemination of the progressive ideas of the men of science, and one whose pages may always be filled with interesting and instructive reading matter.

We have evolved from our inner consciousness an unique and novel scheme for the conduct of the ARCHIVES, a plan which has been tested with success in other departments of periodical literature, and which we feel confident will prove a winning card in the departments of dental journalism. We will divulge the details of this enterprise in a future number.

The field of dental journalism is not unoccupied in this country. There are several old reliable journals whose editors have grown gray in the service, besides some new fledglings who give great promise for the future of dental literature. In the old standard corps of dental journals we fail to recognize that "deplorable lack of editorial ability" which the keen observation of the nameless editor of the *Review*" has led him to notice and which he hopes to correct. There must be a goodly amount of editorial exchanged, or other observers have been looking upon the work of their confreres as through a glass darkly.

The character of the ARCHIVES will be free, independent and markedly cosmopolitan. It acknowledges allegiance to none but its readers, whose interests and demands will meet with zealous attention.

The publication of the transactions of societies and associa-

tions is a feature of dental journalism of to-day which we recognize as being slightly overdone. The subject matter is generally good and valuable, but it is possible to have too much of a good thing. We, therefore do not propose to encroach on this part of the domain of our cotemporaries.

The ARCHIVES will not publish transactions of societies as other dental journals are now doing. We shall aim to give our readers condensed reports of these gatherings, embracing all that is new or of general interest; and as we desire to give the ARCHIVES a distinctive cosmopolitan character, all purely local or personal matter not of interest to the general practitioner will be eliminated from these reports.

We solicit the aid of our friends, old and new, in this enterprise, and promise in return to give our best efforts and attention to supply them with a reliable, live, newsy, interesting and instructive dental journal.

THE ARCHIVES will be issued promptly on the tenth of each month after the February number. The change of ownership and management of the journal has caused an unavoidable delay in the time of issuing the January and February numbers, for which we beg the indulgence of our readers. The price of the ARCHIVES will be \$2 per annum. For further information see publishers notice—eighth page advertisement.

ORIGINAL articles for the ARCHIVES should be short, embracing not more than 1,000 words. No article will be accepted for this department of the journal which has appeared, or is to appear in any other publication. All communications must be accompanied with name and address of writer.

All contributions intended for publication in the ARCHIVES must be written on one side of the paper only. The latest

date for receiving contributions for the current number is the 20th of the month.

Dr. C. T. Stockwell, formerly editor of the *New England Journal of Dentistry*, will be associated with us as Eastern editor for the New England States and New York. Communications for the ARCHIVES from that section should be addressed to Dr. C. T. Stockwell, corner Main and Bridge streets, Springfield, Mass.

Communications intended for the editor should be addressed to him at 2930 Washington avenue.

HISTORICAL.

The ARCHIVES OF DENTISTRY became successor to the *Missouri Dental Journal* early in 1884 and was consolidated with the *New England Journal of Dentistry* during the latter part of the same year.

The *Missouri Dental Journal* was founded in 1869. Homer Judd, M. D., father of the Missouri Dental College, being the editor; assistant editors, Drs. H. S. Chase, Edgar Park, W. H. Eames and W. N. Morrison; committee of publication, Drs. Isaiah H. Forbes, C. W. Spalding and H. E. Peebles. Dr. Judd was succeeded by Dr. W. H. Eames in 1873; following him in 1875, Dr. H. S. Chase took the position of editor, after whom Dr. Judd, in 1877, again became the editor, Dr. Eames, associate editor. Dr. Spalding was the next in 1878, to be followed by Dr. R. I. Pearson, in 1883 associated with Drs. J. B. Patterson and L. C. Hungerford, the journal being published by a dental supply house in Kansas City. The change of location was a short one, and it was reported that the journal was dead, but St. Louis friends insisted that such was not the case, and despite the fact that there had been no signs of life for a month, Drs. Morrison, Spalding and others were able to get the alleged corpse to St. Louis and breath new life into it. The Journal and Library Association was incorporated and a contract entered into with J. H. Chambers & Co. to publish

the ARCHIVES OF DENTISTRY, the Association having entire control of the editorial department, thus making it an independent dental journal, just what it was at its inception by its founders. The *New England Journal of Dentistry* was started by an association of New England dentists for the purpose of publishing the proceedings of their different societies, Dr. C. T. Stockwell being the editor. As stated before this journal was merged into the ARCHIVES in 1884, the editor and his associates joining the editors of the latter.

During 1884-5 and 1886 the editorial staff was as follows: Editors—Drs. C. W. Spalding, St. Louis; C. T. Stockwell, Springfield, Mass.; John S. Marshall, Chicago, Ill.; Prof. Chas. Mayr, Springfield, Mass.; J. L. Williams, New Haven, Conn.; J. Morgan Howe, New York; S. E. Davenport, New York. Associate editors—Drs. Wm. N. Morrison and John G. Harper, St. Louis.

November, 1885, the editor in chief sent me some MS. and a message, requesting me to get out the December ARCHIVES as he was going to New Mexico, to be gone, for perhaps, three weeks and possibly all winter. He did not return for several months and then was unable to take his position, hence I held his place during 1886. The year 1887 marks another change, announced in December. Those who know Dr. Eames will give him a hearty welcome on his return to journalism; those who do not know him, will do well to get acquainted by taking and reading the ARCHIVES.

HARPER.

HERBST'S METHOD.

The recent dental literature has been filled with reports of this method. First we had vague ideas from our German friends, then Herbst paid us a visit, and full reports of his clinics were given.

He came to instruct, and was amply repaid for his generosity by what he learned. Since his visit, nearly every dental meeting has brought up his method for elucidation and discussion.

Some few are very enthusiastic while others find no use for the system. Those who have met with success tell us that we must not expect to succeed in our first attempts.

Judging from experience and observation we conclude that the method has its place in our practice. No one system of filling teeth is the best for every case. In filling proximal cavities in molars and bicuspid his method of placing gold in a cavity and over it a pellet of cotton and condensing the gold by pressing upon the pellet with a rotating instrument is very effective but laborious, and can be more easily accomplished by using a large foot plugger and the hand mallet.

The use of the pellet of cotton condenses the gold without displacing it; this method can be used to fill nearly the whole of the cavity, the finishing being done more quickly by hand or mechanical mallet than by his system. Small cavities, difficult to fill by mallet, may be easily and perfectly filled by this method. The gold is placed in the cavity with the gold pliers, using them as hand pluggers, proceed thus until the cavity is more than full, then use a small Herbst instrument to condense and finish the surface, by placing the plugger in the center of the filling and pressing firmly upon it working toward the margins. Small holes drilled in the handle of a toothbrush will do to practice upon. These small cavities are just where the method can be used to best advantage.

Any of the gold foils may be used, Leslie's Crystal Gold is perhaps the best. In the first-mentioned cavities non-adhesive gold is used at first to be followed by annealed. For contour work it has no advantages, takes as much time and is more laborious than the hand or mechanical mallet.

A judicious selection, from all the known methods of filling the teeth with gold, to suit the case, will give the best satisfaction. For this reason every dentist should master all the different systems. Ocular demonstrations are the best means by which to learn, for this reason attend all the clinics you can. Teaching by word of tongue or pen is unsatisfactory to teacher and pupil.

• HARPER.

TRANSPLANTATION.

At the December meeting of the St. Louis Dental Society, Dr. W. N. Morrison introduced Mrs. T. D. Heed, of Emporia, Kansas, who possessed a transplanted superior right first bicuspid, the operation having been performed by Dr. M. in 1880. A description of the case is given on page 245, Vol. XIV., *Missouri Dental Journal*, which we copy. "Mrs. T. D. H., æt. 35; nervo-sanguineous temperament; careful and appreciative of her teeth; full arch; right upper first bicuspid root, upon which a pivot tooth had been worn for years. By frequent removals the cavity had become enlarged and the root split. She made a trip of a thousand miles to have a tooth transplanted.

She advertised for a tooth and had twenty applicants, from whom she selected a young man about 18 years of age, who would have been willing to give half of his teeth for the liberal sum she had offered for one. His arch was crowded in such a way that the crown of his right first bicuspid had a considerable curve backward which made it especially adapted to the situation in the lady's arch.

The tooth, upon extraction, was found to be a well-developed, long, two-rooted tooth, while the root extracted from the lady's mouth was a single round root, with a bold curve backward at the point. I drilled through the crown and removed the root vessels, filled the canals with gold wire and oxychloride of zinc; then with a large coarse-cut fissure burr, I cut out the process, making space for two roots instead of one, and $\frac{3}{16}$ of an inch deeper than the old one, straightening the curve and generally enlarging its whole length to correspond with the new tooth. When transplanted the tooth was so well supported by its fellows, and the occlusion so perfect, that no splints or ligatures were necessary. There was a slight soreness and swelling for three days, which speedily subsided. The patient wrote one or two months afterward that the tooth was perfectly solid, comfortable and healthy."

After all had examined the case and the lady had gone, a

short discussion was indulged in and the opinion expressed that the tooth would not last much longer, but that it had lasted long enough to show the feasibility of transplantation.

The reason for predicting that the tooth would not last much longer, was on account of a decay (?) just beneath the margin of the gum on the distal aspect of the tooth; those familiar with the work of odontoclasts, blamed them for the cavity. Another unfavorable aspect was a slight discoloration of the lingual half of the tooth, showing that the odontoclasts were at work on that side also.

Dr. Morrison says: "I bore out the socket to fit the tooth, but never cut the tooth for the socket." H.

A FRACTURED TOOTH.

Recently a little girl 8 years of age came to me with a broken superior left central incisor, caused by a fall on the pavement.

The tooth was broken off at a point midway between the gum and cutting edge, the line of fracture being at a right angle to the long axis of the tooth. The tip of the horn of the pulp was exposed but not injured. My plan of treatment was thought out, but the little patient did not return.

I give my plan which may be of benefit to some one; perhaps it may draw out a better one from the fertile brains of our readers.

At the time of her visit I had no time to operate, but I cut out a small piece of rubber dam and punching holes in each end of it, drew it over the adjoining teeth, the rubber covering the broken end of the tooth protecting it to some extent. At visit I intended to fit to the broken tooth a platinum cap concaved to receive a capping of oxyphosphate of zinc, the whole to be attached to the tooth by means of two platinum pins.

After the platinum cap is fitted to the end of the tooth, holes are punched near the ends, then place the cap in

position and mark their position on the broken surface, which should be close to the enamel; drill the holes in the tooth, enlarging them slightly at the bottom, then place pins and cap in place, the pins protruding a quarter of an inch; next take an impression which will retain pins and cap in a proper position; run in the impression a mixture of sand and plaster; after this has set remove the impression and proceed to solder the pins and cap together with pure gold, also cover the cutting surface with pure gold, flowing it with the blow pipe; cut off the protruding pins and finish. Placing the cap in position should be done with care, to avoid forcing anything into the pulp chamber.

A very small piece of quill to cover the opening is formed and varnished with liquid gutta percha and placed carefully over the aperture; next fill the cap and holes with thin oxyphosphate and complete the operation by placing the cap in position. The object is to protect the pulp until the child is about 14 years of age, when a permanent operation can be performed. The line of fracture is rare; as a rule, the line inclines toward the neck of the tooth on its distal surface.

HARPER.

THE WESTERN DENTAL JOURNAL.

Editor, J. D. Patterson, D. D. S.; Associate editors, A. H. Thompson, D. D. S., Topeka, Kansas, C. L. Hungerford, D. D. S., Kansas City, Mo. A forty-eight page journal, published monthly by R. T. Pearson & Co., Kansas City, Mo. Subscription, \$2.00 per annum.

The first number of this new aspirant to public favor has been received. Typographically it makes a good appearance. The contents of this number is varied and embraces much that is of interest to the profession. Its editors are well known as writers, and their names are a sufficient guarantee of the character of the journal. We wish them success.

DR. C. T. STOCKWELL, one of our editors, has been reading a paper treating on "Man's Existence after Death," before some scientific societies.

The argument of the paper was drawn from the facts of embryology. "The one sure fact of our past existence is that we have already lived in other conditions from which we have been born into the present. From this we infer that we shall go forth from this life into one yet larger. Back of the embryonic life is the cell life, and however far back we trace the cell life we are still confronted by the fact of a pre-existing life. At each successive backward stage the cell body or organism in which the life principle is manifested, is of a lower order and the manifestation of life more limited. In this fact we catch a glimpse of the necessity of a constant succession of births and deaths, so-called, if we are to progress indefinitely."

The struggles of the chick just before hatching, to burst its shell and escape into a larger life, were shown to be analogous to the aspirations of men for an immortal existence.

Dr. Stockwell's friends urge him to have his paper published in order to place it before the scientific public. H.

CAULK'S DENTAL ANNUAL No. V., 1886-87, devoted to the collection and dissemination of statistics relating to the business and practice of dentistry. L. D. Caulk; D. D. S., editor and publisher, Camden, Delaware. Price 50 cents.

We are in receipt of this welcome visitant, and find it a great improvement over former issues. As a statistical reference book it is, we believe, reliable, and well worth the price.

The table of contents for this number embraces the following headings: EDITORIAL—Notes and Extracts; Movement Inaugurated for an International Dental Congress; Directory of Over One Hundred Dental Societies in the United States; Dental Periodicals in the United States; Dental Colleges in the United States; Dental Necrology for 1886; Number of Dentists, Number of State Societies, Dealers, Manufacturers, Etc.; Compilation of Twenty Six States having Dental Laws; Dental Patents Issued in 1886; Books and Pamphlets Published in 1886; Additional Dental Laws of the United States. STATISTICS OF FOREIGN COUNTRIES.—Number of Dentists, So-

cieties and Colleges of Canada; Dental Laws of Canada; Special Dental Schools and Societies of England; Dental Societies of Germany; Dental Societies and Colleges of France; Dental Societies of Norway, Sweden and Denmark; Dental Journals of England, France, Germany, etc.; Universities of Europe; Number of Dentists, Dealers and Dental Journals in Foreign Countries. Original Communications.

EXTRACTS.

EXTRACTS FROM THE ANNUAL ADDRESS of W. W. H. Thackston, M. D., D. D. S., before the Virginia Dental Association, August, 1886, published in *Southern Dental Journal*, November, 1886.

The natural man is selfish and self-seeking. The first suggestion of his nature is to get what he wants, and hold fast and enjoy what he gets—in a sense, to antagonize all other men, to distrust and disregard the rights and claims of all other men, to reject the help and aid of other men, and to rely upon his own efforts and his individual resources for the accomplishment of his ends and objects. Such are the feelings, such the sentiments and behavior, of the natural man—but experience, and the observation of the shrewd, and even of the stupid and stolid, soon teach the most sinister and selfish that in union and concord, in concert and harmony and sympathy, there is strength and power; and true philosophy and Christian piety abundantly demonstrate the truth that in the fraternal relation this strength and power finds its broadest field and most potent energy and effect.

In the very nature of things, when a purpose of value or an object of importance is to be promoted or accomplished, men must combine and work in harmony to a common end. Isolated effort, segregated strength, is of little if any avail.

The "Patent Office" is now the rampart and citadel in which the selfish dentist takes refuge when fancying that he

has made an invention, discovery or advance of real or imaginary value.

Patents, nostrums, secret formulas and proprietary remedies belong, by common consent and established usage, to the quack, the artisan and the tradesman. The *manufacturers* and *dealers* in medicines, in instruments and surgical appliances, in general supplies for the physician, the general or special surgeon, have the undoubted and unquestionable right to patent their inventions and original productions. They can do so not only legally, but honorably, for they violate no pledge and infract no provision of our "ethical code." Rightfully or wrongfully—and the preponderance of professional and public sentiment has ever held that *rightfully*—it should be regarded as *improper* and *disreputable* for a professional man, in any of the departments of medicine or surgery, to patent and appropriate any discovery or invention it may be his fortune to make. "Freely he has received, and freely he is expected and required to give," and no dentist who respects and honors his profession, or desires to command the esteem of his associates and co-workers, should touch a patent or handle and deal in a nostrum without first withdrawing from practice and unconditionally surrendering his claims and pretensions to membership in what is now recognized as one of the liberal callings.

We must work in concord and harmony. We must be kind and trusting, generous and brotherly. We must "bear each other's burdens," and in the battle of life "hold up each other's hand." And thus we shall honor ourselves, and honor, and advance, and dignify the profession which has supplied our wants, compensated our labors, and abundantly rewarded our highest aspirations.

CHEMISTRY.—Extracts from a paper before the Virginia State Dental Association, 1886, by Charles L. Steel M. D., D. D. S., published in the *Southern Dental Journal*, November. Doubtless our friend, Dr. Starr, can best tell us how difficult it has been to introduce electrical apparatus among dentists, to a

great extent because of their ignorance of sufficient chemistry to understand the working of batteries, etc. How many new combinations might not chemical researches discover to us; how many oral mysteries would be cleared up, and how much oftener would we practice intelligently rather than experimentally, did we but know more about the methods of analyzing the fluids of the mouth. I said that a paper to be read before a society should contain practical points; perhaps some one thinks I have so far introduced none, but if I may have induced anyone to take more interest in the fascinating study of chemistry, I shall consider I have at least made one point.

* * * I say further that there are times and places when it is the part of wisdom to use amalgam.

The first indication for its use which I would mention is the cheapness with which it may be manipulated. This may seem a sordid motive, but there are patients who would willingly pay the prices asked for amalgam, and thereby save their teeth indefinitely, who would be frightened, if not out of their wits, certainly out of our chairs, at the mere mention of the *necessary* charge for gold, and while those who practice dentistry for fun may do it, yet those who practice for a living cannot, in justice to themselves, spend hours upon troublesome operations without being suitably compensated, which means compensated beyond the ability of many of our patients. Again, we find patients physically so weak that it would be a species of unjustifiable persecution to subject them to so great a tax upon their nervous system an extensive contouring with gold demands.

And a third reason—it may be possible to insert gold perfectly anywhere, yet not everybody can do it. Repeated failures in certain classes of cases should have taught some men that they are not of the number who can; these men can be honest by using amalgam, but not otherwise.

Neither gold nor platinum is soluble in anything but nitromuriatic acid, but an alloy of these metals is readily soluble in nitric acid. A few drops of diluted sulphuric acid poured upon the amalgam, while working it, will take away the oxide and cause the alloy to amalgamate with remarkable rapidity. After using the acid, the amalgam should be washed in aqua ammoniæ, or a solution of bicarbonate of soda, to remove all traces of the acid.

BRIEF MENTION.

Homeopathic Therapeutics in Dentistry, by Dr. J. Morgan Howe, will appear in February ARCHIVES.

A. MORSEMAN, M. D. D. D. S., formerly of Iowa City, Iowa, is now located at 1621 Capital Avenue, Omaha, Nebraska.

HEAT red or white gutta-percha upon a porcelain disk or slab until sufficiently soft to be kneaded full of zinc filings; this will make excellent temporary fillings. B. Q. S,

I HAVE been prescribing powdered sulphur as dentifrice to be used once or twice a week upon teeth, gums and fauces and to be swallowed. Precipitated or washed sulphur is not so objectionable in odor. M.

THE TENDENCY of Americans is to do everything on an extensive scale, which they are doing with limes, lemons and oranges in their growth and consumption. I think they are having an unfavorable influence upon the teeth of the nation. M.

STERILIZED HYPODERMIC SOLUTIONS.—The editor of the *Journal of the American Medical Association* says the best way to secure a sterilized solution is to use soluble hypodermic tablets, dissolving them in clear water brought to the boiling point in a spoon.

ST. LOUIS DENTAL SOCIETY.—Officers for 1887: President, Dr. M. C. McNamara; Vice-President, Dr. Henry Fisher; Corresponding Secretary, Dr. W. N. Morrison, 1401 Washington Avenue; Recording Secretary, Dr. John G. Harper; Treasurer, Dr. A. J. Prosser.

"DEAD MEN TELL NO TALES," was once a professional watchword, but with Dr. Younger's resurrection, there seems to be a rattling among the dry bones, and we may expect Munchausen yarns at any time, M.

DON'T EXTRACT TEETH.—Do not get panicky and imagine the Almighty will not grow jaw enough to accommodate the teeth if they are large. It is an indication the individual will be large and the jaws should not be interrupted in their growth. M.

DAVID SWING says:—The literature of an age is the photograph of its leading men and women. This being the case, it follows that the dental literature of an age is the photograph of its leading dentists. Gentlemen, step forward and be photographed with the rest of us. H.

WE REGRET to announce the illness of Dr. C. W. Spalding. He has been sick for nearly three months, and has not been able to leave his residence for the past two months. It is not expected that he will be able to get out for a month to come. It is hoped that by our next issue we may be able to say he is well.

RUBBER RIMS FOR DENTAL ENGINE.—The most simple rim is one that you can make and put on in a few minutes, and practically without cost. Cut a ribbon half an inch wide from a piece of rubber dam, cutting around corners of the piece if necessary, until you have a sufficient length to reach almost around the drive-wheel, place this in the groove and fasten the ends by passing a single thread through the ends of the rubber and tying in a simple knot. For the small wheel cut a small band from the rubber dam and stretch over the rim and place in the bottom of the groove. For the large wheel, a No. 9 rubber band cut and united as above will make a neater job. H.

"A WHEEL WITHIN A WHEEL."—"Those who have read Dr. K's practical articles as illustrated in the *Ohio Journal*, must

have noticed his wonderful confidence in the powers of nature to bring the mal-placed dental organs into their proper positions after the obstructions are out of the way. And therein we think is the secret of his great success. The votaries of nature make no mistakes in their devotions so far as science goes. She performs all that is promised."—*Ohio State Journal*.

The "*obstructions*" are only a few bicuspid and molars. It is too sweet to observe the kittenish manner in which these giddy young Buckeyes use taffy. M.

THE OHIO STATE DENTAL SOCIETY have had a terrible time over the "third molar impacted."

Gentlemen, these cases are being multiplied every day by mistaken dental extraction. These officious members of the profession have not followed the advice of the ARCHIVES and thrown their forceps into the sea, river or lake, whichever is nearest them, but continue to use them on deciduous and permanent teeth and roots which should never be removed any more than any other bones of the skeleton. It is with these murderous weapons that the little sausage grinders of the land are destroyed so that they cannot prepare the food that is required to form a normal, well developed being, producing these runts; sawed-off and hammered-down specimens of our race where "impacted molars" fare the worst. Use the engine freely to grind down sharp corners of deciduous crowns and roots and allow them to remain until the permanent teeth have made all the physiological use they can of them, and then, gentlemen, there will be nothing for forceps to do. Dr. Keely even, admits that in "A Case in Practice," the loss of two of the five teeth is attended with injurious consequences. M.

VOLUNTARY INHIBITION OF THE HEART'S ACTION.—Dr. Lydston, of Chicago, writes to the *American Practitioner and News* that he has the power of voluntarily inhibiting his heart's action, and he has demonstrated it to professional friends.

DR. D. R. JENNINGS: Always put your bur as near the pulp, when you put it on a tooth, as you expect it to be, and then draw it toward the enamel. By so doing it will be less painful, for the reason you have cut off the tubuli near the pulp and the dentine its sensitiveness to a great extent.

ASK AND YE SHALL RECEIVE.

1. WHAT is the most simple and practicable way of attaching rubber to aluminium plates?

2. Is there any objection to aluminium as a base for artificial dentures?

3. ARE many dentists using celluloid?

4. CAN pewter solder be used in uniting gold to platina?

5. What difference is there in the following cases: The pain in the tooth is relieved by holding warm water in the mouth, in another case cold water has the desired effect?

6. It is said that accidents will happen to the most painstaking. Now, will you or some of the enlightened indicate the proper treatment to both soft and hard tissues upon which arsenical paste has accidentally been applied by escaping from a cavity into which it had been placed to devitalize a pulp. Of course you will say, seal it more securely; don't let it get away from you. Yes, but it did, and the mischief is done. How shall it be speedily repaired? Other escharotics, to-wit, chloride of zinc, caustic potassa, are our friends when carefully and legitimately used, but when they go roaming at large, are enemies to be dreaded. Suppose the caustic potassa should get into the gums, and deeper on to the alveolar process, what would you do to correct the mistake? It may be that these questions answered will benefit others besides me. D. R. S.

ST. LOUIS, January 18, 1887.

7. What is it? A boy four years of age was brought to me, having a tooth coming in between his central incisors. The tooth is about the size of a lateral incisor and has its side toward the front. Only about a line of the tooth is visible; the root of the left central is being absorbed on its mesial surface; the centrals are separated about half a line.

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MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various Antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. Miller, A. B., Ph. D., D. D. S., Prof. of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

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GENTLEMEN:

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In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

They will be found in all the leading stores where such goods are sold, and where Dentists can recommend their patients to call for them. This obviates the necessity of Dentists keeping such preparations, which has proved by experience to be generally unprofitable. I should be pleased to forward a sample of my TABLETS or POWDER to any Dentist, free of expense, on receipt of a postal card giving address, that all may have an opportunity to test its merits. I am,

Respectfully yours,

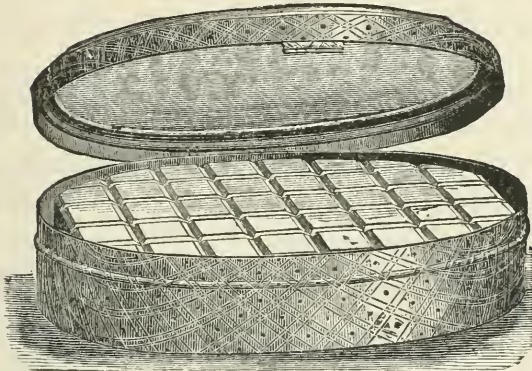
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61 CEDAR STREET, NEW YORK.

New York, March 1, 1884.

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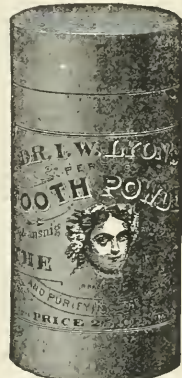
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Flat and Vulc. plain	- - - - -	10 "
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Imp'd. Pink Rubber at	- - - - -	\$7.50 lb.
New Pink Rubber	- - - - -	6.00 lb.
No. 1 Pink and No. 1 x Pink	- - - - -	6.00 lb.
Orange, Red, Brown, Dark Brown, Black and Imp'd. Black Rubbers	- - - - -	3.00 lb.
Ash's Whalebone, the best base Rubber in the Market	- - - - -	4.00 lb.
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TO THE PROFESSION.

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As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondents, as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

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VOL. IV., No. 2.] FEBRUARY, 1887. [NEW SERIES.

ORIGINAL ARTICLES.

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Nature's chief masterpiece is writing well."

HOMŒOPATHIC THERAPEUTICS IN DENTISTRY.

BY J. MORGAN HOWE, M. D., NEW YORK.

PERICEMENTITIS.

Some reasons were presented in a previous paper (*vide*, ARCHIVES OF DENTISTRY, December, 1885), for regarding the systemic condition, as a more important factor in exciting or predisposing to diseased conditions of dental and maxillary tissues than has been commonly recognized, and for regarding systemic treatment as logical, and as an important adjunct in dental practice. It is proposed now to give some personal experience in such treatment of pericementitis; an inflammatory process which illustrates systemic influences by unexpected onsets when local conditions have been unchanged, and by variability of course and termination, as well as by the uncertain results of local treatment. It might well be expected that

cases in which functional disorders, or systemic debility, predominate as exciting causes, would probably show most clearly favorable results from constitutional treatment, but such results are by no means confined to these cases. I have been in the habit of treating in this manner all cases in which it was considered advisable, without regard to the etiological diagnosis, and have not discovered that the benefits of systemic treatment are at all limited by my own ability to recognize a systematic cause for the disturbance. In my efforts to develop the benefits of systemic treatment, I have not resorted to such methods, when removal or change of local factors, mechanically or surgically, was indicated, or afforded relief; but only when such means as venting by drilling, correction of mal-occlusion, opening abscess, etc., were not indicated, or did not afford relief. From my own experience, and some knowledge of present practice I think there must be many cases of the latter class, in which local medication, such as depletion or counter-irritation, use of stimulants or anodynes do not materially modify the inflammatory process; the depressing effects of pain and suppuration are endured, and if no worse result follows, the tooth at least is materially weakened in its connection with the peridental tissues. All local measures as they prove effective have value in that proportion, but even the most ardent advocate of their efficacy must recognize that there is still much to be desired. One of the ablest and most conservative teachers in the country, I understand to advise consigning to "general practice" cases of "general" pericementitis, caused by "functional derangement" or "systemic debility," and relegating to the forceps, teeth affected by periosteal inflammation of the (highest) "fifth grade," in which there is great systemic sympathy. Since, I may safely say, the general practitioner knows and cares little about teeth; the dental practitioner should be prepared to treat all dental disturbances; he alone approximates to a knowledge of the local conditions, and no other should better understand the character of remote causes capable of producing such local expressions of irritation, nor be better prepared

to meet the indications by effective treatment. Tonics, anodynes and saline cathartics I have found valuable in former years in cases requiring constitutional treatment, but I have found means adopted later, much more reliable than the best results ever obtained by the former methods; remedies selected on the homœopathic basis, have for several years served in my practice to control or modify pericementitis more quickly and more certainly than any other means with which I am acquainted, and I hope and expect that the efficacy of such treatment will be more fully recognized and developed in dental practice.

MERCURIUS VIVUS,

Is, I think, the most valuable, because the most frequently indicated remedy in pericementitis. It is pure metallic mercury, triturated with milk sugar, and was recommended in dental practice many years ago by Dr. Henry S. Chase (*Dental Cosmos*, vol. x, p. 244, 1868), but I do not think its value has ever been generally recognized. My own lack of satisfactory results in the treatment of pericementitis, and the urgent need of more effective means, induced me more than ten years ago to begin the use of this remedy, with the other means I was in the habit of relying upon—local medication, counter-irritation, etc—as I thought they were indicated in each case. It soon appeared to me that satisfactory results were obtained more frequently and speedily than before, and that the period of suffering was curtailed, and suppuration—when the effort to prevent it was not successful—was less extensive, and the systemic depression less marked. After two years or more of such experience, I began to dispense with the local use of medications, and soon discarded them altogether on being convinced that the results were fully as favorable as when I had made all the various applications to the gums which were in common use, and now, although I do not deny to the latter a certain value; I use them, if at all—as placebos only, so entirely do I rely upon systemic treatment in cases of this inflammation, not

relieved by mechanical or surgical means. I will instance three cases, illustrative of the successful use of mercurius (I give the 3d (centesimal) or 6th x. (decimal) trituration, a powder of about 5 grains each dose) which are not exceptional. Cases in which it seems to produce little effect, are so rare, that I think it is as much entitled to be regarded as a specific for acute pericementitis as anything in medicine is for any diseased condition.

CASE I. Miss C., aged about 18, nervous temperament, low vitality, anæmic. Called the first time to seek relief from odontalgia, which had kept her awake much of the previous night. A left inf. first molar is the seat of pain, is elevated in the socket, and exceedingly sensitive to the lightest touch; it is filled largely with gold, and she says it has had the roots filled also, but that she has frequently suffered similar attacks, which generally last several days before she obtains relief, and greatly reduce her strength. Without any local treatment a powder of mercurius is administered, and she is supplied with others, of which she is directed to take one—dry—every hour, till relief begins to be noticed, when the intervals are to be lengthened to two hours. As she seems rather incredulous and discouraged, to cheer her somewhat, I tell her she may report in four or five hours if she feels no better, and I will try again. She did not come back till the third or fourth day after, and then reported that before night the pain was quite gone, and the tenderness to touch had disappeared by next morning. The filling was afterwards removed to ascertain if any defect could be discovered to account for these repeated attacks of inflammation, but the roots were well filled, and no cause could be assigned that local treatment would remove. She has had several such attacks of pericementitis since, but without delay she comes for her “powders,” and has always been entirely relieved in a few hours.

CASE II. A lady from a suburban town, on calling for services for herself, wishes I could tell her what to do for her cook who suffers a great deal from toothache, and has now been in bed one or more days from that cause with a “swollen

face," but she will not consent to have the teeth removed. On learning that the symptoms clearly indicate pericementitis, powders of mercurius are prescribed the same as in former case. The result reported by the lady at a subsequent visit, was that relief was so speedily obtained as to "seem almost like magic." The same servant was several times subsequently relieved in the same manner.

CASE III. A short time ago I finished the treatment of an inferior bicuspid, whose root had been slightly absorbed, so as to enlarge the apical foramen, beyond which the tissues were very irritable. I had closed the foramen as carefully as possible with a small plug of gutta-percha and filled the root with oxychloride of zinc, without apparently producing irritation. The third day after, the patient reported that the tooth had been so sore ever since that she had come to get me to remove the filling. With some reluctance she was persuaded to give up that idea for the present, and to take mercurius every two hours during that day, and return the next morning if there was not very decided improvement. She did not come next morning, but reported when she came to fill a later appointment, that the tooth was not at all sore the next day, and had remained quite comfortable. I stated correctly that these cases were not exceptional. I would add, however, that sometimes relief from acute symptoms is somewhat more delayed than is here indicated, but comes later by persevering with the remedy; the latter course I try to impress on the patient's mind as the one that I consider most important. I have never used nor recommended any constitutional treatment—in the place of—the most favorable local conditions that can be produced, but resort to mercurius or other remedies, instead of any other threatment, after removing local factors in the disturbance, or when—as in cases I and II—this was impossible.

• There are several other remedies which have a marked influence on peridental tissues, but I will refer to only two others.

HEPAR SULPHURIS CALCARIA ;

commonly hepar sulphur, and by allopathic physicians, in recent years (since they have used it), called by its chemical designation sulphuret of calcium or calcium sulphide, has a wide range of use in general medicine, and among its early recognized virtues was an influence over inflammation ; it tends to produce resolution, or when suppuration is inevitable, to hasten the latter and modify it and all resulting constitutional symptoms.¹ In a general way this is much like the action of mercurius, but the sphere of its influence is different, and my experience with it is that it cannot be depended upon to control pericementitis, as it will some inflammatory processes, but that it will act with marked effect in that affection, in hastening suppuration—when the latter is inevitable—in limiting its extent, and in modifying constitutional depression, at the time, and immediately after the formation of an abscess. When used for these purposes I think it will rarely disappoint, but it cannot take the place of mercurius to abort suppuration in dental practice, and I never use it now to hasten it, because I have come to regard this termination as never inevitable until it has occurred ; after suppuration takes place it will act like a tonic.

SILICEA OR SILICA,

common flint, like the former is triturated with milk sugar. It is of value in certain cases of chronic pericementitis, especially with indurated swelling ; of its influence on suppuration, Dr. Richard Hughes (Manual of Pharmacodynamics, London, 1876) says "it does not act like mercurius in averting this process when threatening ; and it is inferior to hepar sulphur for promoting it when inevitable, but when it is once estab-

¹Dr. Sidney Ringer recognized some of the virtues of this remedy in the *Lancet* Feb, 1874, and recommended its use for boils, scrofulous and unhealthy sores, in doses of 1-10 of a grain every hour. Since that time it has been incorporated as a remedy in the therapeutics of that author, and also in the works of Phillips and of Wood.

lished and by its excess or long duration is causing mischief, the effect of small internal doses of silica in checking it, is something magical."

There is abundant reliable testimony of its usefulness in diseases of the bones and periosteum, and it is indicated in works on materia medica for aveolar abscess and "fistula dentatis," but I have been disappointed in its use for these conditions, although it is no doubt worthy of further trial. The cases in which I have found it of service have been similar to the following:

Mrs. H. had a lower molar—the roots of which I had filled several years before—which began to be sore and painful. The condition was rather sub-acute or chronic, but was quite troublesome and interfered with rest at night. Mercurius, which I sent her to the country did no good, the annoyance continued all summer, but she did not report about it to me till fall, when she came suggesting that she would rather lose the tooth than suffer the continuance of the present condition. I found a hard tumor opposite the roots, there was no fluctuation, but it was somewhat tender to firm pressure, and the tooth was tender to percussion, and was aching intermittently, especially at night. Silica 12 x. trit, a powder, four times a day, was followed by immediate improvement, and a month later her husband wrote me that she had continued taking the medicine for two or three weeks, that the swelling had gradually disappeared, and that now the tooth was perfectly comfortable. This condition has not changed for the worse since that time, more than a year ago.

Such cases as the above occur occasionally, and from my experience I should use silica with confident expectation of benefit.

It is not intended, to claim for these remedies, that they will invariably fulfill the expectation of cure, but that after local conditions have been made as favorable as possible, those cases that are still intractable will so frequently assume a quiescent and healthful condition, that the demonstration of their influence will be satisfactory to those who use them in a sufficient number of cases to make a fair trial.

SELECTIONS.

ON DESTROYING THE PULP AND FILLING THE PULP-CAVITIES AND CANALS.

BY A. H. FULLER, M. D., D. D. S., ST. LOUIS, MO.

The practice of destroying the pulp of a tooth in order to relieve the patient from tooth-ache caused by its exposure, and thus prevent the necessity for the extraction of the tooth, and in a measure preserve its usefulness, dates well back into the Eighteenth Century.

John Hunter in his "Treatise on the Natural History and Diseases of the Human Teeth," 1771 and '78, after speaking of certain cases of exposure of the "cavity" in which he recommends that the tooth be extracted, then immediately boiled, with a view of making it perfectly clean, and also to destroy any life there may be in the tooth; and then that it be restored to its socket, says "if the patient will not submit to having the tooth drawn, the nerve may be burned; that this may have the desired effect, it must be done to the very point of the fang, which is not always possible." He mentions sulphuric, nitric and muriatic acids, caustic alkali and common caustic—preferring the latter for the reason that it is a solid, and more easily introduced into the cavity. Joseph Fox, who wrote in 1803 and 1806, says, "attempts have sometimes been made to destroy the nerve with the actual cautery, by introducing a red-hot wire, but I have scarcely ever found this plan to be effectual, and as it always gives great pain, and sometimes produces an increase of inflammation, I think it better never to recommend it; indeed all applications are very uncertain, and therefore if relief be not speedily obtained, it is advisable to suffer pain once for all by having the tooth extracted." He, some years previous to writing the above, recommended and

practiced partially removing the tooth, with the intention of severing its nerve connection, and then forcing it back into its socket; this operation he abandoned. In cases of tooth-ache in the incisors of the upper jaw he recommends extracting, filling and replanting. Thomas Bell, "Anatomy, Physiology and Diseases of the Teeth," 1830, says, the "absolute destruction of the nerve of the tooth has been attempted by a variety of means, but the impossibility of instantaneously effecting this in such teeth as are situated at the back of the mouth and possessing several diverging roots, is a sufficient ground for rejecting this practice." He then mentions the actual cautery as generally impractical, and objects to the use of acids and caustics, and after giving some methods of palliative treatment, winds up as follows:

"But the hope of relief which these remedies may, from occasional success, hold out, is in most instances completely fallacious, and the extraction of the tooth can alone be depended upon." Jobson, in his treatise published in 1834, after referring to the actual and potential cautery, says, "an infinitely more effectual and far less painful mode of destroying the nerve, is to crush it at once by the introduction of a small trocar or common broach."

"It is surprising that this simple plan should not have been suggested before. The pain attending the operation is but momentary, as the nerve is wholly destroyed by a single turn of the instrument." Robertson, in his "Treatise on the Human Teeth," 1835, recommends the actual cautery when the nerve is to be destroyed for the purpose of pivoting the root, but recommends extraction as a rule. Fitch, in his "System of Dental Surgery," 1835, says, "when in some rare case our only choice is to extract the tooth or destroy the nerve, we may choose the latter, and use the actual cautery or any acid or caustic we choose, and after this, fill the tooth." In 1836, Dr. Spooner, of New York, published to the profession and the world the discovery of his brother, two years earlier, the method of destroying the dental-pulp by the use of arsenious

acid. Goddard on the teeth, 1844, recommends the use of *pure* arsenious acid for the destruction of the pulp stating that the sulphate of morphia which dentists were in the habit of adding, increased the pain and prevented the escharotic action of the arsenious acid; no mention is made of any attempt to fill pulp canals. Harris' second edition, 1845, says, arsenic for some time promised to be a most valuable remedy and was soon used by almost every practitioner in the country, but it was found that although the nerve of a tooth could be destroyed by it in a few hours, if it were afterwards plugged it was just as liable to give rise to alveolar abscess as one which had been filled after the destruction of its nerve by inflammation—again in giving the treatment of tooth-ache, says the propriety of the employment of remedies of any kind for this purpose, (the destruction of the pulp), except to a front tooth, may be looked upon as exceedingly questionable—and in cases where a root is to be pivoted, advises the use of the drill to destroy the pulp. Previous to this time, 1845, we can accept the fact that the use of arsenious acid was questionable practice, although strongly advocated by a few well-known practitioners. The filling of pulp-canals came to be practiced long after the destruction of the pulp had become one of the operations recommended and performed in dental surgery, and within the present century. The first suggestion of this operation that I have been able to find is in the work of Joseph Fox, previously referred to, 1806, page 56, where in the case of an accident in which the two central incisors were fractured so as to expose the pulps,¹ he says he should extract the teeth, remove the contents of the cavity in the tooth and completely fill it with gold-leaf—again Delabarre, in his treatise on Second Dentition, etc., published in 1819, says, "I have performed upon myself and also upon several other persons an operation which consists in extracting a diseased tooth, removing its soft central parts, filling it with gold, shortening its extremity and then replacing it." Again in the *News Letter* of January, 1852, in an article by Wadsworth on treating and filling pulp-canals, he says: "During the writing of this article I have been op-

¹See ARCHIVES, Vol. III, page 381.

erating upon a lady who, ten or fifteen years ago, had the second right superior bicuspid extracted, the nerve removed and the tooth plugged and returned to its socket by Dr. Gardett, of Philadelphia; the patient and the doctor took great pains and the tooth is now of much service." Numerous other cases are reported but the foregoing are mentioned merely to show that the filling of the roots of transplanted and replanted teeth is not, as has been claimed, a comparatively new operation, as well as to show that the advantage of having the canals filled was recognized before it was generally possible to perform the operation. Dr. Edward Hudson, of Philadelphia, probably first practiced the filling of pulp canals and cavities of teeth in the patient's mouth.

In the first volume of the *American Journal of Dental Science*, 1839, Dr. Barker says, "more than thirty years ago, or before 1809 the late Mr. Hudson followed the practice of removing the nerve perfectly, drying and cleaning the internal cavity, and immediately filling with gold to the highest point." A bill for dental services¹ rendered by Mr. Hudson is now in the possession of Dr. Wick, of this city, one item of which is "for stuffing the cavity of one tooth from the end of its root with gold, \$10.00." This service was rendered in 1824. Drs. Barker, of New York, and Maynard, of Washington, followed this practice at an early day, mention of which is made in the second edition of Harris.

A few years after the introduction of arsenious acid for destroying the dental pulp, the practice of filling root-canals began to be generally advocated. In 1842 Dr. J. D. White, of Philadelphia, wrote and published a thesis on "Destroying the pulp and filling pulp-canals." This was republished in the *News Letter* of 1850.

His method was to apply arsenious acid, remove the root-vessels, dry the cavity and fill with long cones of gold made from No. 6 gold-foil. He favored leaving a small space between the root filling and the nerve trunk, from one-eighth to a quarter of an inch, for reasons which he gives. He did not at-

¹See frontispiece.

tempt to fill molar roots except when quite accessible, or when the crown was gone

Soon after this, different methods were advocated, some carrying a small pellet of cotton moistened with creosote, (which was added to the list of dental remedies in 1836) to the apex of the root, then filling with gold, others filled with cotton alone, while again, and for a long time, it was contended by some, prominent among whom might be mentioned Dr. George Watt, that there was no necessity for filling the canal as the foramen was soon closed by nature, that the gold in the canal by conveying thermal changes was itself a source of irritation and objectionable.

Experiments were made by Dr. McQuillen, of Philadelphia, the result of which is given in the first volume of the *Dental Cosmos*, showing that the fluids would penetrate to the pulp cavity through the foramen in the fangs and also through the substance of the root itself. Cases were cited by Dr. Watt to prove the contrary. The following from the *Dental Register* of September, 1859, will serve as an example: In April, 1845, Dr. Watt filled a tooth, but not the canal; in 1853, upon removing the filling, the canal was found to be "as dry as the powder of Cromwell's soldiers."

At the twelfth annual meeting of the American Society of Dental Surgeons, held in New York in 1851, the following was among a number of aphorisms offered by Dr. Dunning: "A tooth whose nerve is exposed may be permanently saved by entirely removing the pulp and filling the place occupied by it with gold." Dr. Trego used the gutta-percha for this purpose in 1852, or four or five years only after its introduction.

The manner of using this material was first described and its use advocated by A. Homer Trego, in the *Cosmos* for 1867. Attention was again called to it by a paper read before the Illinois and Iowa State Dental Societies in 1873, by Dr. G. O. Howard, of Galena, Ill, since which time its use has been advocated by many, prominent among whom, Drs. G. A. Bowman and H. J. McKellops, of this city, should be mentioned.—*Caulk's Dental Annual*.

[This article which we copy from *Caulk's Dental Annual*, No. v., 1886-7, is one of a series of papers embracing historical scraps gathered from the records of the past of dentistry which we purpose publishing from time to time for the benefit of our readers. It will supply them with some data by which they can distinguish the *old* from the *new*, and enable them to place the credit for originalty where it justly belongs.—ED.]

KINGSLEY AND COYLE VS. DENTAL EDUCATION.

Norman W. Kingsley, President of the New York State Dental Association, comes out publicly with the announcement that dentistry is a distinct, separate, and independent profession in no way allied to the profession of medicine. According to this view, the dentist is a mere mechanic, wholly irresponsible as to any vital relationship between the teeth he plugs and the nerves and blood-vessels which supply them with nutriment, as well as the attached soft parts and bony socket in which they grow.

Mr. John H. Coyle, of Thomasville, Ga., concludes that the demand which he recognizes as being general for a higher education of dentists "evinces too great a play of the imagination, unduly excited by an exalted admiration of the medical education." According to his view, a dental education consists in its most perfect form of such a course as shall qualify the practitioner for the following duties:

1. The arrest of caries by filling or otherwise.
2. Extracting teeth and controlling hæmorrhage.
3. Regulating teeth.
4. Treating and filling root canals.
5. Treating odontalgia.
6. Prevention and cure of alveolar abscess.
7. Removal of salivary calculus and cleaning teeth.
8. Treating diseased gums.
9. Restoring lost teeth.

He proposes to "cull from medicine all that is possible con-

cerning anatomy, physiology, chemistry and general pathology. On all general points of practice, such as ætiology, histology, special pathology, therapeutics, and prophylaxis, medicine is as silent as an Egyptian mummy."

Does this mechanic comprehend the relations of all those conditions which impair the general nutrition of the system to corresponding derangements in the nutrition of the teeth? Has he ever been called upon to treat the gums of a person affected with scorbutic disease? Does he know the influence of constitutional blood-taints upon the development of the teeth? Has he studied the odontalgia of neurotic people, and is he acquainted with the causes of such neuroses? Is he familiar with the nature of morbid growths in the alveolæ, and does he know anything of the *oidium albicans* or *leptothrix buccalis*? The outbursts of indignation with which Kingsley and Coyle attempt to resist the natural dependency of educated dentistry upon general medicine shows plainly enough how very much they need a little more medical education, and with what poverty of resource they attempt, mere mechanics that they are, to discuss any question of scientific education. Kingsley assumes the air of a ward politician, and offers to vacate his office of President of the New York State Dental Association if some one will prove his want of honesty and sincerity.

The dental profession cannot afford to support such *clap trap*.—*Progress*.

DR. G. A. BOWMAN has devised a simple temporary binder or file for periodicals. He takes a copper wire, of sufficient length, points the ends: when he has received the second number of a journal, he makes two holes through the back of each, one two inches from the top and the other the same distance from the bottom, and passes the points of the wire through the holes, and bends them down toward each other, binding the two numbers together. The next numbers are added by bringing out the points to a right angle, so that they may pass through holes punched in the new number to correspond with those on the file.

H.

EDITORIAL.

DOES TRAUMATISM OF ANY KIND PRODUCE SUPPURATION.

The editor of the "*Independent Practitioner*" in his February issue, page 104, makes the very pertinent enquiry, "Can there be suppuration without the presence of micro-organisms." In view of the fact that one of the markedly persistent features of some of the diseased conditions the dentist is called upon to treat is the presence and persistent flow of pus, we are led to making another, and, as we believe, equally pertinent enquiry, viz., Does traumatism of any kind produce suppuration; for, upon a correct solution of these questions only, can we formulate a treatment that will meet all the indications in these suppurative oral diseases—alveolar abscess, pyorrhæ, etc. This subject is attracting much attention among medical men and scientists, and our medical journals contain frequent allusions to it.

The *Medical Record* for December 25, 1886, contains a discourse delivered before the New York Academy of Medicine by H. Knapp, M.D., Professor of Ophthalmology in the Medical Department of the University of the City of New York, entitled Fermentation, Putrefaction and Suppuration, with demonstrations and experiments.

Our review of a portion of his address is necessarily somewhat lengthy, but we think the importance of the subject justifies its publication.

In presenting this subject the speaker gives a brief review of the historical development of Bacteriology, commencing with *Fermentation*, referring to the investigations of Levoisier, Fobroni, Thenard and others about a hundred years ago, who regarded it as a simple chemical decomposition.

A year later Turpin described the yeast of beer as a vegetable microscopic organism which he termed *torula cerevisiæ*. The experiments of Franz Schulze in 1836, were also referred to. In 1837 the subject was taken up by Schwann and "to him rather than to Cagnaird-Latour must be given the credit of the first real proof of the view that the yeast-cells were the real cause of fermentation." His experiments proved that the air contains some substance which is destructible by heat, and causes putrefaction and fermentation. Helmholtz repeated Schwann's experiments and demonstrated that oxygen was not the cause of putrefaction.

Suppuration.—Is suppuration identical with, or the consequence of, putrefaction?

The speaker said: "The function of pus seemed to me of such fundamental importance that I took it up experimentally and studied it under the following heads:

1st. Does traumatism of any kind produce suppuration?

2nd. Do foreign bodies occasion the formation of pus?

3d. Are there any kinds of chemical agents that cause suppuration?" He follows these queries with the details of a series of experiments which he made, the first being in answer to the first question, "Does traumatism of any kind produce suppuration," and in the summing up of the question he said,

"This galaxy of facts, which might be increased indefinitely, furnishes indisputable evidence that mere traumatism of whatever kind, never causes suppuration."

2. The second question, Do foreign bodies, as such, cause suppuration, may be answered in brief, for Theo. Leber and others have experimentally studied and brought it to a certain final solution. Leber states that indifferent, non-oxidizable foreign bodies, aseptically introduced into the tissues or cavities of the human body, cause no inflammation, in particular no suppuration.

To verify this conclusion of Leber and others, he repeated their experiments, giving in detail the results by which he states previous views, even if entertained by scientists of the greatest merit are refuted.

The last and most critical question, *Do chemical agents cause suppuration without the intervention of microbes?* He stated has been answered positively by all but a few very recent investigators. Baumgarten, Theo. Leber, Uskoff, Orthmann, Councilman, Rosenbach, Passet and others, assert having convinced themselves that suppuration is caused by certain chemical agents, for instance mercury, oil of cantharides, petroleum, turpentine, and, above all, croton-oil, even if aseptically introduced. Four recent observers, however, contest this assertion on the strength of new and more rigorous experiments. The leading investigator among these four is J. Straus, who for the first time used a perfect aseptic method. A sterilized glass tube, tapering in a point on one side, closed with a sterilized cotton plug on the other, was filled with sterilized croton oil, and the point sealed up. He sterilized the skin of the animal by singeing it with Paquelin's cautery, stabbed it with a sterilized knife, introduced the thin end of the tube, broke off its point, blew through the cotton plug the oil out into the sub-cutaneous tissue, withdrew the tube, and sealed the wound-canal by burning its orifice with with the cautery. Among eighteen injections of turpentine thirteen did not produce suppuration; of five injections of croton-oil one suppurated; of two injections of mercury none suppurated. When suppuration ensued he found cocci in the pus.

E. Scheuerlen repeated the experiments of Councilman-Cohnheim with greater antiseptic precautions in the laboratory of the surgical clinic (Bergmann's) of Berlin, under the auspices of Dr. Gaffky and Dr. Fehleisen. In his thirty-two experiments with about a dozen irritating substances, among others turpentine and croton-oil, only one was followed by suppuration. In this case the sterilization and healing had been imperfect, and bacteria, which were found in the purulent exudation must have penetrated into the wound.

In 1885 a very instructive series of experiments was made by George Klemper, the professor of Leyden's laboratory at Berlin. He made injections of different substances chiefly turpentine and

croton-oil, using Koch's syringe sterilized in boiling water, cauterizing the skin with glowing iron according to Straus. He also made a number of experiments with the glass capsules of Cohnheim and Councilman. Only in a few experiments in which the precaution had been insufficient, he obtained pus recognizable as such macroscopically and microscopically.

The last author the speaker mentioned was Dr. J. A. Ruys, who made a series of experiments in the Pathological Laboratory of the University of Utrecht, published November, 1885, in the *Deutsche Medicin. Wochenschrift*. The four last-named authors drew from their experiments the conclusion that bacteria are the cause of every suppuration.

This unconditional opinion, the speaker said, is not generally accepted. Even in Berlin where it has the strongest supporters, I found, last winter, the most competent bacteriologists unwilling to adopt it without reserve. It may be so, they said, but thus far it is not demonstrated beyond a doubt. I thought it therefore particularly desirable to subject the third question, *Do chemical agents cause suppuration*, to a further experimental inquiry. In my experiments (they are not yet concluded) I used turpentine and croton-oil, because these two substances have proved the most powerful to initiate or favor suppuration.

The speaker then gives in detail the experiments he had made, being a repetition of the experiments of Klemper and Ruys using their methods so modified as to give clean results. Among other experiments made by the speaker was the injection of a sterilized mixture of one part of pure croton-oil and two parts olive oil into the anterior chamber of the right eyes of four rabbits, thrusting the thoroughly sterilized syringe through the sclerotic lens, and pupil into the anterior chamber.

As soon as the opening of the point presented in the pupil I pressed upon the rubber ball, and one or two drops escaped and mounted to the top of the anterior chamber, without disturbing the iris or producing any apparent change in the size and configuration of the chamber. The left eyes of the same rabbits were experimented on in the same way; the croton-oil,

however, was mixed with a very small quantity of a pure culture of staphylo-coccus aureus on agar-agar. After the syringe was withdrawn the point of puncture in the sclerotic was sealed up with a glowing strabismus-hook. The next day the right eyes showed moderate reaction, the drop of oil was distinctly visible in the upper part of the anterior chamber; pupil, iris, and the cornea clear. The left eyes discharged pus from the conjunctiva, were swollen, the irides very red, the contents of the anterior chamber muddy. On the third day two of these rabbits died. The right eyes had only a few flakes, no pus in the anterior chamber; their vitreous was clear. The left eyes showed a hæmorrhagic exudation, with coherent flakes, and soft, purulent patches in the anterior chamber, and purulent patches in the vitreous. Cultivation and microscopic specimens showed no, or only a few, microbes in the right eyes, but multitudes of microbes in the left.

On the fourth day another rabbit died. Result of the examination the same: Fibrino-leucocytic exudation in the right eye, hæmorrhagic, and purulent exudation, with multitudes of microbes, in the left.

The fourth rabbit of this series showed no particular reaction in the right eye. The cornea was hazy, iris and pupil, however, visible. Left eye enlarged, a yellow deposit in lower third of anterior chamber. Animal looked sick, but was not moribund. Killed on the seventh day. In right no pus; some exudation in iris angle, vitreous turbid. Left eye; anterior chamber and vitreous cloudy, containing puriform patches. Dry cover-specimens and cultivations were made from both eyes, and many organs, with the following results: The microscopic specimens showed a few unmistakable cocci in the right eye, multitudes in the left.

Cultivations after seven days: Right anterior chamber one small colony, right vitreous four small colonies. Left anterior chamber and vitreous, luxuriant growths, liquefying gelatine on the third day. Blood from heart, six isolated colonies; blood from kidney, four well-developed colonies. Brain, none.

I have still to add that in this group of rabbits I injected

aseptically small quantities of sterilized croton-olive oil under the skin of the back of the right side, and the same, contaminated with staphylo-cocci aureus, under the skin of the back of the left side. In neither was there any remarkable reaction. Yet from the left sides tolerably well-developed growths were obtained. In the three before-mentioned rabbits cultivations were made from both eyes. Anterior chamber and vitreous showed abundant growths in the left (infected) eyes, very scant growths from the right.

How shall we interpret these results? Suppuration with luxuriant growths of cocci in the infected organs, some flaky fibrino-leucocytic exudation in the eyes into which croton-olive oil sterilized, and with, it seems, sufficient antiseptic precautions, had been injected, yet these eyes contained some cocci. The answer is given by the more extensive examination of the body of the fourth rabbit. Suppuration with multitudes of cocci was found in the infected eye; no suppuration, but some cocci, were found in the blood, the kidneys, and the other eye. From the focus of suppuration the cocci had passed into the blood and were deposited in the kidneys, the chief place of their elimination, and in the other eye, which by the injection of croton oil was irritated and in a fit condition for their development.

To remove this uncertainty I made another series of experiments five days ago. Sterilized croton-olive oil was injected into the right eyes of three rabbits, and an emulsion of the same and staphylococcus albus into the left eyes of three other rabbits. The needle of Koch's syringe was introduced through the ciliary body, and advanced close behind the iris until it presented in the pupil. After the withdrawal of the syringe the puncture in the sclerotic was sealed with the actual cautery. The experiments succeeded very well and were remarkably clean. The results were striking; the infected eyes suppurated freely, the others showed only some whitish streaks in the upper part of the cornea, descending in two rabbits along the posterior surface of the cornea. One of these eyes was enucleated yesterday. There was no pus in the anterior chamber,

the vitreous was clear and the inner membranes were healthy. The streaks at the posterior face of the cornea presented themselves as whitish deposits. Under the microscope they consisted of networks and pencils of coagulated fibrine, and of epithelial cells of Descemet's membrane isolated and in clusters. Adherent to these cells and scattered in the specimen were numerous oil-globules; no trace of microbes.

In concluding he said: As far as these experiments go, and in consideration of like results obtained by some recent investigators, they furnish, it seems to me, sufficient evidence of the truth of the proposition, that suppuration in every case depends on the action of microbes. If, on the one hand, traumatism of any kind, if foreign bodies, if the most irritant chemical agents, if anything you may imagine is not of itself capable of producing suppuration; if, on the other hand, the addition of pyogenic microbes to any irritating substance, or wound, or any lesion whatsoever, produces, under proper conditions, suppuration without fail, we are certainly justified in ascribing to pyogenic germs the causative action in the formation of pus.

In conclusion, gentlemen, two words. What is pus? "An albuminous, non-coagulable fluid containing multitudes of leucocytes." What is suppuration? "The splitting of living nitrogenous tissue into simpler compounds through the influence of certain bacteria." In this way the parallelism of the three processes—fermentation, putrefaction, and suppuration—is established.

BALANCE AMONG THE PHYSICAL FUNCTIONS.

"Dr. H. C. Wood, of Philadelphia, maintains that to make it possible to live to a good old age, the several vital organs must be approximately equal in strength. The man of ordinary physique, who possesses this fortunate balance of power, will in all probability outlive an athlete whose development has been unequal. Excessive strength in one part is, in fact, a source of danger. An over-developed muscular system in-

vites dissolution, because it is a constant strain upon the less powerful organs, and finally wears them out. Death, in the majority of cases, is the result of local weakness. It often happens that a vital organ has been endowed with an original longevity less than that of the rest of the organism, and its failure to act brings death to other portions of the system, which in themselves possessed the capabilities of long life."—*Pop. Science Monthly*.

We quote the above because we think this theory of Dr. Wood applies to a case we have in practice. The young man—about thirty years of age—is a veritable "picture of health," to all outward appearances, being the recognized champion of athletes in this city. His muscular system is markedly developed, showing the results of his years of gymnastic training and exercise. That he is what he claims to be, "an absolutely well man in every particular," few would question. His teeth have always been good, requiring but little attention, *until* within four or five months. To-day they are almost a total wreck. His dentist, by whom I was called in consultation, has been wholly baffled in all his attempts to stay the progress of destruction. Almost every tooth is just simply melting down, and the various plastic filling materials that have been tried prove utterly ineffectual to arrest the process.

Now the question of "cause" very naturally arises. To my own mind it seems to be, clearly, of a constitutional nature, and traceable to *too much gymnastics*. The entire *muscular* system has been developed abnormally, at the expense of organs that do not come in for their proportion of the athletic exercise and consequent nutrition. In fact, the blood being constantly determined to the muscular system, the teeth, and probably other organs that are not proportionately exercised with the muscles, fall a prey to the over-developed muscularity of the general system. "The balance among the physical functions" that formerly existed, in this case, has been broken, and the "death" of the teeth "is the result of the consequent local weakness," brought about by the blood and nerve currents being determined from the normal balance.

C. T. STOCKWELL.

PERFECTED STEEL.

W. J. Miles, a blacksmith, in business at Louisville, has made a discovery which is likely to revolutionize the iron and steel industries of the world. The *Courier-Journal* was represented at a recent test of steel produced by Miles' process, and the verdict of a number of experts, who were also present, was unanimous both as to the practicability of the scheme and the excellence of the metal produced.

The above, if true, will be good news to the dentists, as we require the best of steel in our instruments to drill and cut enamel, one of the hardest known substances.

To keep ourselves well supplied with keen cutting burs, excavators and drills is one of our greatest daily expenses.

By the Miles' process every tool or instrument has the same temper. He says:

"I can put a thousand dozen razor or scissors blades into my bath at once, and guarantee that every one of them will come out with exactly the same temper and without any further attention."

He can take cheap malleable cast-iron shears and convert them into the best steel. Experts in shears know that one of the difficulties in their making, and one in keeping them sharp, lies in the fact that the two blades, being tempered separately, are rarely of the same hardness, and when pressed together the harder edge cuts and dulls the other. The blades of the Miles shears, having been tempered together, were of the same degree of hardness, and no amount of pressure produced any cutting or "grinding." Most of the shears in use are of malleable iron, with a steel edge inserted in each blade and securely welded. The cost of cutting and fitting these edges and welding them in place is considerable, besides requiring skilled labor. The Miles process converts the shears entirely into steel after they have been finished and riveted, and at a cost practically inappreciable. The shears are then of solid steel instead of having merely steel edges, and as the blades are of equal temper they will hold the edge much longer. A

pair of solid steel shears can be made by the Miles process at one-third of the cost of the iron shears edged with steel.

The most surprising and convincing test of the extraordinary hardness and elasticity of the steel made by the new process was exhibited. Mr. Miles had procured two specimens of burglar-proof safe plates. For many years various safe companies have engaged in strong rivalry to secure plates that would resist burglars' tools. These companies defy any burglar to bore into one of their safes with a quarter-inch drill (the easiest with which to penetrate) in less than ten or twelve hours. Mr. Miles took one of his drills, one-eighth of an inch in diameter, and bored through a burglar proof safe in exactly forty minutes. He removed it once or twice and honed the edges.

We hope to have some burs and drills tempered by this process, and will then test them and give the result to our readers.

The process is a secret, and a company has been formed to develop the discovery and put the new steel on the market.

H.

FLOWERS OF SULPHUR IN THE TREATMENT OF PYORRHOEA ALVEOLARIS.

The *British Journal of Dental Science*, January 15, contains the discussion upon pyorrhœa alveolaris before the Odonto-Chirurgical Society of Scotland, in which Mr. W. Bowman Macleod is reported to have said: "Whatever may be our opinion as to the part which tartar plays in this disease, I think we are all agreed that tartar being matter in the wrong place, it should, if present, be thoroughly removed so as to give any subsequent treatment the best possible field for its recuperative action. This being done, I find that the bi-daily cleansing of the teeth and gums with a tooth powder composed of flowers of sulphur and precipitated chalk, will very soon restore the parts to healthy condition, the pus secretion will cease, and the

teeth become firm in their sockets. Whether the tartar be the cause or only a concomitant, or the pyorrhœa be owing to a perverted condition of the mucous secretion, sulphur will, and does act beneficially. Its therapeutic action is stimulating and antiseptic, and it is likewise a solvent of calculus. If it contains a little free sulphurous acid, which it frequently does, so much the better. As I have said, it is stimulating, antiseptic and a solvent of calculus, and it has this further, and what I think very great merit, viz., that it can be regularly and thoroughly applied by the patient. I have now been using it for over a twelvemonth, and have reason to be satisfied with its uniform success; and, as I recommended it to the members of the society in March last, I will be pleased to hear how it has succeeded with those who have given it a trial. In response to this call on the members present, Mr. Smith said: "He believed the mixed powder of sulphur and magnesia brought before the society by Mr. Mcleod, was, in all probability, destined to be of much service, not only in pyorrhœa alveolaris, but in other affections of the mouth. The rationale of its action seemed founded upon tangible principles, as there was no doubt that sulphur and its combinations had played a prominent part in the role of therapeutics as applied to similar affections.

Mr. McGregor said he had used Mr. Mcleod's prescription in one or two cases, and had found most marked and beneficial results following its use.

Mr. Durward spoke favorably of the sulphur powder, and said he had also found it a good powder for use when artificial teeth were worn above stumps.

Mr. G. W. Watson thought that if this mixture advocated by Mcleod used as a tooth powder gave satisfactory results in the treatment of pyorrhœa it would be a great boon to us, as our patients would be able to take in hand their own treatment.

THE Iowa dentists are making progress in arranging for their state meeting to be held in May at Cedar Rapids.

IMPLANTATION.

The implantation of teeth by Dr. Younger seems to be the latest craze that has taken possession of many members of the profession. Numerous cases have been recorded where he has operated, in different parts of the country, all of which are said to be successful. (?) Might it not be well to wait a little longer before pronouncing this method a modern wonder in minor surgery. Let us hear, later on, from these "successful" cases. While in Boston, last October, he implanted a tooth for a gentleman as an exhibit of his method before the New England Dental Society. At the time it was claimed to be a success. The gentleman is now, however, "wearing the tooth in his vest pocket." One drop does not make a shower; neither does one failure condemn the method. But, unless there can be some special explanation offered why this case so soon failed, it may be considered as reasonably prophetic of the result of the majority of such cases at an earlier or later date.

C. T. S.

NINTH INTERNATIONAL MEDICAL CONGRESS.

To be held at Washington, D. C., September 5, 1887.

PRESIDENT.—N. S. Davis, M. D., LL. D.

SECRETARY-GENERAL.—Jno. B. Hamilton, M. D., U. S. A.

SECTION 17—DENTAL AND ORAL SURGERY.

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It is the duty of this committee to make ample provision for the work of this department, providing all needed facilities, such as chairs, engines and all appliances: to provide patients and subjects for the Clinics; to confer with the operators, learn their needs, and supply them so far as possible.

There will be others added to this Committee as the work may require.

COMMITTEE ON PROSTHETIC DENTISTRY.

Dr. Geo. L. Field, Detroit, Mich.; Dr. H. B. Noble, Washington, D. C.; Dr. A. O. Hunt, Iowa City, Ia.; Dr. John Allen, New York, N. Y.; Dr. T. T. Moore, Columbia, S. C.; Dr. W. N. Morrison, 1337 Washington avenue, St. Louis, Mo.; Dr. R. B. Donaldson, Washington, D. C.

It will be the duty of this Committee to provide facilities for the work of this department, and arrange for its efficient performance; and make such regulations as shall secure the greatest benefit from the demonstrations.

ORGANIZATION.

The following rules and regulations have been adopted by the Ex-Committee for the guidance of the work of the Congress and of its sections:

The Congress will consist of such members of the regular medical profession as shall have registered, and taken out their ticket of admission, and of such other scientific men as the Executive Committee of the Congress shall deem it desirable to admit.

Books for registration of members will be ready on and after September 1, 1887, and on each subsequent day during the session. Any member desiring registration prior to this time, may apply by letter to the Secretary-General, and forward his dues with his full address, when a receipt will be returned.

The membership fee, for residents of the United States, will be (10) ten dollars; there will be no dues for members from other countries. Each member will be entitled to receive a copy of the transactions of the Congress when published by the Ex-Committee.

The work of the various sections will be directed by the President of the section, and the order will be published in a daily programme for each section.

Brief abstracts of papers to be read in the sections shall be forwarded to the secretaries of the proper section, on or before April 30, 1887. These abstracts shall be treated as confidential communications. Papers relating to topics not included in

the list of subjects proposed by the officers of the section may be accepted after April 30, 1887.

The officers of each section shall decide as to the acceptance of such proposed communications, and the time for their presentation.

The Ex-Committee cordially invites members of the regular profession, and men eminent in the sciences, collateral to medicine in all countries, to participate in person, or by papers, in the work of this great humanitarian assembly.

The attendance of medical students, and others interested in the work of the various sections, or in the general addresses delivered in Congress, will be permitted on the recommendation of the Secretary-General, or the officers of a section, on their taking out of the registration committee a general ticket of admission, fee one dollar; such persons cannot take part in the proceedings.

All communications and questions relating to the special business of any section must be addressed to the President, or one of the Secretaries of that section.

OFFICERS OF SECTIONS, AND THEIR DUTIES.

The officers of each section, including foreigners, shall be a President, not less than five Vice-Presidents, four Secretaries (two foreign) and not less than ten, nor more than thirty, members of council.

PRESIDENT.—The President of each section shall be its executive officer, who is solely responsible for the efficient work of his section. He shall nominate all persons to the Ex-Committee, for any office connected with his section. He shall select and regulate (by conference where desired, with the other officers of his section), all papers or questions for discussion, and reject only after such conference, such papers or questions, as he may deem inadmissible to the transactions, or for presentation in his section. He shall preside at, and regulate the business of each meeting of his section, punctually at the hour named, making an opening address to the section, if he so desires. He may at any time adjourn the session of the section, when in his opinion, sufficiently long, as when there are too many papers for the day, etc. He shall strictly enforce Rule 8 of the preliminary organization. When a paper is read, or discussion occurs in a foreign language, he shall resign the chair to a foreign officer of the same nationality as the language employed.

VICE-PRESIDENTS.—They shall assist the President in the performance of his duties at each meeting of the section when requested by him, and shall take their seats on each side of the presiding officer. They shall aid the President in consultation on the value and character of all papers or discussions that are to be presented in the section or the transactions.

SECRETARIES.—The four Secretaries of sections shall arrange among themselves, or at the request of the President of the section, the order of their duties. They shall keep accurate records of the proceedings of each day in their section, and make such daily report of it to the Congress as the President of the section shall direct; the foreign secretaries acting for their own nationalities. At the close of the session they shall present all their minutes, in good order, to the Secretary-General for publication in the Transactions, if so desired by the Executive Committee.

MEMBERS OF COUNCIL.—It is expected that the Members of the Council will aid in every way to make the sessions efficient and instructive. They will also be expected to advise with the President on any matter pertaining to the work of the section, and on questions which may arise in connection with the publication, in the transactions of papers read, or discussion had in the section.

CORRESPONDENCE.

MEETING OF THE FIRST DISTRICT DENTAL SOCIETY OF NEW YORK.

NEW YORK, January 22, 1877.

EDITOR ARCHIVES.—During this month New York has been invaded by an incidental gathering of unusual numbers and interest, not only eclipsing all efforts of a previous nature by the local societies, but also putting in the shade the gatherings of our national bodies.

No meeting of dentists is on record that can boast of over seven hundred in attendance. We find no estimate below this number. To undertake anything but a synopsis of what has passed before us in observation, is all that can be promised. On the first Tuesday of the month, the monthly clinic was held as usual, at the 9th street depot. A goodly number was in attendance. Dr. Evans of New York continued his teachings of his methods of forming Crowns and Bridge work. The questions that come to our hearing, impressed us that there was a need of a text book on this subject, from some one who could compile a concise illustrated work of this nature, and by one of experience, of more than a thirty days' term. I think here is a chance for a profitable enterprise by some journalist.

The clinic was made up of social incidents of a marked character, which only need to be seen and heard to be appreciated. Just here, let us say that no nucleus of fifteen dentists can afford not to pattern after these clinics which are now become a marvel to all who visit them from outside. We say, "Go and do likewise."

The regular meeting of the First District Dental Society convened at the Thirty-second street depot with a large number in attendance (as usual of late). The attractive subject for

the evening was Enamel Structure, by Frank Abbott. It was presented very creditably indeed, but for the closing remark of the paper, viz.—“If, after the description of methods and chemicals employed, which the subject has given in detail, and the results have been exhibited, as are shown by the drawings passed around, I say if those engaged in histological work are not able to accept the conclusions of the writer, then it can only be attributed to a dishonest purpose.” This is the substance. No one can secure honest fame, by any such “*lapsus linguæ*” as this. On the whole we never saw the essayist appear to better advantage, and this was voiced by others. This paper was discussed by Drs. Heitzman, Boedecker, Andrews, of Cambridge, Mass., George Allen, and Atkinson. Much of interest was brought out and very much was said which, if it goes into print, will injure those who said it. Scientific gentlemen cannot afford to be ungentlemanly by holding up their confrères to vulgar ridicule. This was done much to the regret of many. These gentlemen are all earnest, able and honest, we believe, and such language as was used at this meeting can but do much evil. We hope that the good missions of the society will be no more burdened by it. If we overburden the readers of the ARCHIVES by what we are about to describe, we can only add, that the half will not or cannot be told. Predictions were voiced freely that the society had blowed a trumpet with an uncertain sound, that the twenty-five hundred invitations, and a belief that there would be a response of five or six hundred, would result in a big disappointment.

On Sunday morning previous to the meeting we took a walk we often take, down Broadway as far as 41 East 9th street. This is the home of our Prophet, Priest and King of the dental profession—Dr. Atkinson. “Don’t you forget it,” (the address) and send in your congratulations that he is spared to see his seventy-second year, looking so full of life—this on the 23d of January. “Long may he live.” Coming events cast their shadows before. At Dr. Atkinson’s this Sunday morning we met one of our best and tried men, Professor J. Taft, hale and hearty, with the exception of a hunch-back hand, produced by

a fall on the sidewalk. I always think of a steam engine when he stands in public to speak—a good deal more in him than he can get out. We three sallied out to catch the breeze of the coming events of the week and brought up at Heitzman's laboratory on Forty-fifth street. The entire afternoon was spent in looking at the revelations of the microscope in the field of embryology by Boedecker and now being produced in beautiful drawings by that adept hand of Heitzman. Six articles are now quite ready for publication for the ———— Don't get jealous, because a certain journal is to carry off the prize. Now all we heard talked over, I will not reveal here, but that there is a feast for the eye and mind in store can be taken as settled.

Between now and the middle of September next, if I mistake not, our foreign friends and ourselves will be made particularly glad. Some things are to be seen, and they will be made so plain, that "all who run may read." "Go slow. Solemn times at hand." When we see this biggest show on earth—nerve fibrillæ as big as Gulliver's walking cane, and reticular structure as large as dinner plates. I think some at least who have so long watched will say "Now letteth thy servant depart in peace." Sunday evening we made our way for the Sturtevant House, to be the head-quarters for the coming week.

We found at the hotel strong indications that the dental profession was in motion (we use the term dental profession a little guardedly at this time for reasons that may appear). On Monday by noon all fears were dispelled. It was evident that a big gathering was on foot. When the gavel was dropped by President Carr in the Masonic Temple at eight o'clock Monday evening it was a proud moment for the First District Dental Society. On the stage were many of the veterans including such as John Allen, Atkinson, Allport and many others, and at the front their gaze was met by nearly six hundred medical specialists, some said—others emphatically said they were dentists pure and simple. President Carr opened the meeting with a fruitful welcome interspersed with many good things

and none of more import than that proclaiming the need of a building for a dentists' home, in which to have a meeting place, library, clinics, museum *et cetera*.

This is a grand purpose, if it is put out as a purpose. We hope it will not prove a miscarriage, as others have, of the same kind. We do not know that we inspired the thought that gave birth to this project in the mind of Dr. Carr, but one of our late letters did advocate the same enterprise—and more we believe it could be carried to a consummation and stand as a lasting honor and profit to all who shall support it. The times indicate a need of advance movement, and here is an opportunity. Professor Taft's response to President Carr's welcome was a vigorous one, full of facts that stirred the pride and enthusiasm of all. Professor Truman's paper was given in a very earnest and effective style, containing not a few grains of wheat.

Following this, Dr. Atkinson was called out and he proceeded to sift the paper in his energetic style, bringing all his histological vim down to the analysis of the pericementum, which proved a bone of contention between the disputants. The audience applauded equally both sides.

Dr. Shumway's paper was commended by all. It was a very unique article. Doubtless the histologists would have picked at it if they had had time. Dr. Knapp's paper was warmly received.

Dr. Kingsley was asked by the President to discuss the paper, but replied it left nothing to discuss. Dr. Kingsley delivered a critical essay on the Regulation of Teeth, which made it lively for Drs. Talbot and Farrar. Some people are so afraid of criticism they do not catch the value of it. One of the greatest weaknesses of our Societies is, so much wholesale approval of what is presented, and the prevailing idea has crept in that it is a mean thing to dissent. We heard Drs. Atkinson and Kingsley earnestly deprecated on this ground. If there is any one thing that will strengthen an honest, earnest worker it is intelligent criticism. The first clinical gathering on Tuesday proved so much of a success that it left

no doubt about the remainder. To undertake anything like detail of the four series of clinics would be impossible. There was not only all that was advertised, but much more. An intense interest was manifested throughout. The whole affair was an occasion for much pride for the management. We have found no one who estimated the attendance at below seven hundred. Praise was heard on all sides. It was a gigantic reunion, and how our hearts were stirred within us as we talked with many by the way, and recounted the evidences of development during the last twenty-five years. One of the noticeable things that engaged our attention was the new faces of younger dentists. The biggest show on earth closed with a banquet on Wednesday evening, attended by members and their friends. About this there was a misunderstanding. The impression was in the minds of many, that the banquet was open to all who received an invitation to the general exercises: on this ground not a few were disappointed. This mistake (if one, we think it was) called out not a little criticism. There occurred at the banquet a ceremony that was not on the programme. Dr. Kingsley put to rest all uneasiness regarding any future supposed antagonism to the efforts for the success of the Dental Section of the International Medical Congress. The ugly hatchet that had haunted so many of late was buried deep out of sight of mortal eyes. It was electric in its effects. Strong men full of spirit gave way and embraced the Doctor on all sides. It was the "*coup d' état*" of the whole occasion. Praise was heard from all quarters. Dr. Kingsley asked only in return, that those who have in hand the business of the Medical Congress, Dental Section would as heartily aid in the success of an International Dental Congress, when the time comes to act in the interest of that body. This was promised by Dr. Allport.

Thus ended the eighteenth anniversary meeting of the First District Society of the City of New York, and all were supposed to have gone home happy.

This letter will not be complete without a notice of the monthly meeting of the Central New Jersey Society, held at

the house and office of Dr. Watkins, of Montclair, the evening of the 20th inst. The Doctor had made this the occasion of a house and office warming, having been burnt out and now rebuilt. He had invited any and all at the New York meeting, and the result was a large attendance. The structure and its surroundings are unique, arranged to a nicety of convenience, and were much admired by all. Dr. Harlan gave a very able and interesting paper on the Surgical and Therapeutical treatment of caries of the teeth and alveolar process in man. It was discussed by Drs. Stockton, Atkinson and Mills. As the time was limited the usual programme of the meeting was cut out, so that the New York visitors might return the same night. We much regret to report a very unfortunate occurrence. Dr. Marvin, of Brooklyn, had read a paper in answer to one by Dr. Kingsley. "Dentistry not a specialty of Medicine," two weeks before in Brooklyn. For some reason this was announced for this meeting. After what was said by Dr. Kingsley at the banquet the night previous, Dr. Marvin was asked by Dr. Kingsley—"Will you read your paper now, at Montclair?" Dr. Marvin replied that "he could not withdraw the reading of it." Well, he did read it, and from what came of it, I do not see how he can help but deeply regret it; certainly many others did. It placed the New Jersey dentists in a very unpleasant position with their guests. We will only say that the meeting was brought to an abrupt close and the bounteous collation that was provided was largely laid upon the shelf, and a general feeling of disappointment was manifested because of the sudden termination of the meeting.

We would not dare to report the italic expressions that rung in our ears en route for the train. Such a light as that (paper) should never have been set *on a hill*. It would have done less harm under a bushel at this particular time. "Whatsoever men sow" they must not squirm if they reap that bountifully.

AN OBSERVER.

CHICAGO LETTER.

CHICAGO, ILL., February 4, 887.

MR. EDITOR:—Our brethren of Chicago who attended the Eighteenth Anniversary of the First District Dental Society of New York have returned, and all are full of compliments of their hosts and the royal manner in which they were entertained. The meeting will go on record as the grandest in many respects ever held in the world. If we may judge from the remarks of those who were privileged to be present the above statement is not overdrawn.

The papers and clinics were all of high merit, and the fund of information carried away by those who attended, will pay large interest on the time and money expended.

The banquet was in very truth "a feast of reason and a flow of soul."

Such gatherings are of inestimable value to the profession, and the more we have of them the better.

The most gratifying immediate result of this meeting was the attitude assumed by the *opposition* to the Section on Dental and Oral Surgery in the coming International Medical Congress. The Chicago "boys" came back with kindly feelings towards the enterprise. The journey to "Damascus" has resulted, as we hoped it would, their conversion has been complete, and like "Paul," they are now zealous for the cause which before they were anxious to destroy.

We have no desire to open afresh the old sores nor to dampen the ardor of the new converts, but there seems to be a little misunderstanding in regard to whom shall be invited to special membership in the Congress. This ought to be corrected at once, and the matter of eligibility to regular and special membership fully understood.

The impression has gone out that at the late meeting of the officers of the section held in New York, it was decided to invite all members of dental societies to membership in the Congress. This we are told was not the case. The matter came up for discussion, but no action was taken upon it, for no

one present at that meeting had any authority to pass upon a question of "membership by invitation." That is a matter in the hands of the Executive Committee of the Congress, and can only be decided by them in a full meeting and such a meeting does not again occur until early in next June.

It might be well to quote the rule on membership as found in the rules adopted for the government of the Congress, and which is as follows:

Rule I. "The Congress shall consist of members of the regular profession of medicine, who have inscribed their names on the register, and shall have taken out their tickets of admission; and of such other scientific men as the Executive Committee may see fit to admit."

This clearly proves our statement that the matter of membership outside of the regular profession of medicine is in the hands of the Executive Committee. Those not holding the regular medical degree come under the provision of the rule for the admission of "other scientific men," and this covers all departments of science in any manner associated with medicine and surgery.

To open the doors to all applicants indiscriminately who might claim admission, would defeat the very end the framers of the rule had in view, which was to save the Congress from being over-run by the great numbers of practitioners in the profession of America who are not regularly qualified. Such gentlemen would therefore not be eligible to membership under the rule. The same condition is found in the ranks of dentistry, consequently the Executive Committee could not be expected to do for us what they could not do for their medical friends who did not possess the regular qualification.

It is true, however, that the Executive Committee recognize that our position is somewhat different, and as a consequence have granted to the Section on Dental and Oral Surgery, larger liberty and discretionary powers than to any other section in the Congress, and they are still willing to do all they can for us, even to strain a point in our behalf in regard to membership; but they cannot be expected to go beyond a lib-

eral construction of the rule. All fair-minded men will admit that to go farther than this would endanger the scientific success of the Congress.

As a Section we have the good-will of the General Officers of the Congress, who appreciate the embarrassments under which it has so far labored, and they will do all in their power to assist it, which is not inconsistent with their duty to the whole profession.

With such assurances no fear need be entertained that we shall receive other than the most generous treatment.

With peace declared in our own ranks, the "hatchet buried" and the "pipe of peace" smoked, it only requires united action to make this section worthy of dentistry, and if the plans inaugurated several months ago are carried out, of which there seems every prospect, it will be the grandest meeting in the whole history of dentistry. DENTATUS.

"A HALF TRUTH IS THE WORST KIND OF
A LIE."

CHICAGO, January 1, 1887.

MR. EDITOR:—In the May number of the *Items of Interest* there appeared an article by Dr. Norman W. Kingsley headed, "Was it Honest?" in which he related the circumstances of some dentist having collected money for him, and having kept a certain portion of it. As the case related was in some respects so nearly like one of which I had some knowledge, it occurred to me that it might be the same case. In fact, I presumed it was, and if so, I knew he had a letter that would throw some light upon the subject. In the July number of the same journal I asked him to publish this letter in full in the August number of the journal, that the matter might be more fully explained and understood as to who, if anyone, had been dishonest in the matter, if it was not honest.

This letter Dr. Kingsley has not yet seen fit to publish. In the November number of the ARCHIVES some correspondent

intimates that the present President of the American Dental Association is the party to whom Dr. Kingsley referred, and as I happen to have the honor of holding this position at the present time, I take it for granted that I must be the party in question. In the December number the doctor comes out and says, if he does not prove his statement to be true, he will resign his position as President of the New York State Dental Society, etc.

That the reader may more fully understand about the letter referred to, let him take the May and July numbers of the *Items of Interest* and read what is there said. Now, as to the charges, and to save Dr. Kingsley all the trouble I can in making out his case, I will say that I did send a patient to him, as he states. He did make her a set of teeth. He did send a bill to me to collect, and I did collect some money for him; and when collected, I kept such portion of it as I thought justly belonged to me, and still have it. The exact amount and an itemized statement of the entire transaction will be found in the letter and statement which I sent him. I asked him to send for publication in the August number of the *Items of Interest* (this being the journal in which the circumstance was first mentioned in print) "not a copy, not a synopsis, but the *original* of this letter and statement." When this is done with any statement of explanation that he may see fit to make, I will give the matter the attention that its importance demands.

With the acknowledgement that I did keep a portion of the money collected on Dr. Kingsley's account, it is proper for me to state the further facts, (which he has neglected to mention), that soon after I sent him my letter and statement, he engaged a certain law firm in Chicago to recover the money retained by me. A member of this firm called to see me, and presented the claim, and said he was instructed by his client to commence suit against me for the amount if it was not paid over forthwith. I declined to comply with his request, and gave him my reasons for so doing, stating to him the character of the evidence that I should produce in Court. "He saw the

point," and returned the claim to his client, declining to prosecute it.

A few weeks later a second attorney, accompanied by a relative of Dr. K., called to see me in regard to the same matter. I again declined to pay. Suit was again threatened, but I again explained my position and defence, but to make it perfectly certain that Dr. K. could collect his claim, I offered to secure to him the amount of the bill to be paid over at the termination of a suit, even though I might beat him in Court, if he would prosecute the case so that I could have the legal right to prove in Court and publish in our dental journals the transaction in full. Suit was never brought. I give to Dr. Kingsley the first chance to explain why.

In conclusion, permit me to say that in my judgment this sixteen year old pretended personal grievance of Dr. Kingsley's has received quite enough attention in our dental journals, and unless he comes out squarely and publishes the letter and itemized statement called for, so that the profession may get a clear idea of what all this fuss is about, I shall not, in the future, feel bound to answer further communications in regard to it. Very truly, yours,

W. W. ALLPORT.

PROTOPLASMIC RETROGRESSION.

MARYVILLE, Mo., January 18, 1887.

EDITOR ARCHIVES:—I saw in the December ARCHIVES, page 549, an extract from a paper read before the American Dental Association on "The Protoplasmic Nutrition and Molecular Metamorphosis in the Dental Tissues." As it corroborates observations I have made, I think practical deductions can be made that will induce more intelligent operations on sensitive teeth, and add comfort and benefit to our patients and more satisfaction to ourselves. I am glad that science demonstrates the truth of my observations, although made without the aid of a microscope. I realize I have learned a lesson that by prac-

tical observation we may learn much of importance, although without all scientific learning and improved apparatus. Yet, we should observe and preserve for reflection everything pertaining to pathological conditions, whether deemed of importance or not, and bring forward our discoveries for the inspection of our professional brethren. Several years ago I discovered absorption of the dentine under metallic fillings, and having observed the same pathological condition in sensitive teeth many times since, and seeing nothing in dental literature of others having observed such conditions, I present them for consideration.

The first case that attracted my attention was a very sensitive tooth which I had filled two years previous with amalgam, and as the patient had occasional attacks of neuralgia connected with the locality of that tooth, I extracted it, when on splitting the tooth open lengthwise the filling remained fast in one-half of the tooth. On the inside of the cavity in the direction of the pulp the dentine was absorbed away nearly half a line, clearly showing that absorption had taken place after the tooth was filled. I have since that time observed the same occurrence several times. Again I have seen sensitive teeth that were filled with metallic fillings where calcification of the pulp had occurred in the form of pulp stones and a deposit of secondary dentine to nearly obliterate the pulp canals and extensive exostosis on the outside of the roots. Now in diagnosing such cases we should not lose sight of the fact that irritation produces two results with their sequels in all the tissues of the body; either absorption or an excess of nutrient pabulum that will be deposited in the tissues irritated. Now in sensitive dentine we do not want either result except in a very slight degree, and even that might be questionable. Very slight irritation might in soft sensitive teeth induce the deposition of lime salts so that they would stand the wear of attrition and resist the action of corrosive agents better. But in dense teeth the slightest irritation would be detrimental.

In consideration of the foregoing deductions is it not wise to consider the pathological conditions of the teeth we are oper-

ating on that we may act intelligently, by using gutta-percha and non-irritating cements until such time as the teeth will be less sensitive, if we would save the teeth and give our patients comfort.

J. S. BRYANT.

CHICAGO DENTAL CLUB.

CHICAGO, January 27, 1887.

DEAR EDITOR:—The Chicago Dental Club held its annual meeting at the Tremont House, January 24th, when the following officers were elected: President, L. P. Haskell, D. D. S.; Vice-President, John S. Marshall, M. D.; Secretary, Arthur B. Freeman, M. D., D. D. S.; Treasurer, Dr. E. M. S. Fernandez; Business Committee, Eugene S. Talbot, M. D., D. D. S., Dr. Austin Freeman and Charles P. Pruyn, M. D., D. D. S.

Very courteously yours,
ARTHUR B. FREEMAN, Sec'y C. D. C.

GALESBURG, February 4, 1887.

EDITOR ARCHIVES:—The Western Illinois Dental Society met in Galesburg, January 11, at 10:30 A. M. The President, Dr. Moore, being detained at home by sickness, Vice-President Dr. M. S. Woodward was called to the chair, which he filled (in every particular) in an efficient manner. Several minor changes were made in the Constitution. Applications for membership were received, and the fortunate ones elected. The President's address was read by the Secretary. On motion of Dr. Tibbets, a question box was established. The afternoon was devoted to clinics, which were held in the offices of Drs. Stone and Davis.

Dr. J. A. W. Davis, of Galesburg, read a paper on "The Benefits Derived from Attending the Dental Societies." Dr. Vawler, of Cambridge, a paper on "Cements, and their Uses." Dr. F. Christaner a paper on "This and That in Dental Practice."

A telegram was received from President Moore, saying the boy was doing well.

Dr. C. J. Tibbets, Quincy, read a paper on "Artificial Crowns." A paper entitled, "Treating and Filling Devitalized Teeth" was read by Dr. W. T. Magiee, Rock Island.

Macomb, Illinois, was chosen as the place for holding the next meeting of the society.

Officers elected for the ensuing year: S. J. Sharp, Keewanee, President; G. A. Vawler, Cambridge, Vice-President; R. W. Bailey, Macomb, Secretary; D. E. Coulson, Galesburg, Treasurer. Executive Committee—Drs. F. Christaner, Abingdon; G. W. Thompson, Quincy; H. M. McKee, Princeton.

Dr. Mariner, of Ottawa, was elected an honorary member.

Adjourned to meet at Macomb third Thursday, October, 1887.

W. D. ARMSTRONG, Secretary.

INTERNATIONAL DENTAL CONGRESS.

NEW YORK, February 4, 1887.

EDITOR ARCHIVES.—A conference of dentists, who were in attendance at the eighteenth anniversary of the First District Society of New York, was called at the Sturtevant House, to consider the feasibility and advisability of taking steps for the calling of an International Dental Congress at some future date. Thirty-five dentists were in attendance. Among them were Drs. Northrop, Dwinelle, Littic, Walker, Perry, Carr, Kingsley and Mills, of New York City; Keech, Coyle, Winder and Waters, of Baltimore; Hunt of Washington; Darby, Truman and Peirce of Philadelphia; Brophy and Harlan, of Chicago; Shumway, of Mass.; W. P. Dickinson, of Iowa; Watkins, Meeker, Brown, Levy and others, of N. J.; Bartholomew, of Springfield Mass.; and others whose names escaped the Secretary.

The meeting was called to order, and elected Dr. W. H. Dwinelle Chairman, and Dr. Geo. A. Mills Secretary.

Dr. Kingsley opened the discussion by some remarks, in

which he considered the advisability of taking steps for organizing a meeting to be called An International Dental Congress, and he offered the following resolutions:

Resolved, that in the opinion of the conference, the interests of the dental profession throughout the world will be advanced by an international dental congress.

A discussion then followed, in which Drs. Northop, Truman, Brophy, Hunt, Winder, Keech, Kingsley and the chairman took part. There was no difference of opinion as to the advisability of holding such a congress at some future time, and the year 1888, 1889 and 1891 were severally discussed and considered. The year 1890 was out of the question, because of another international medical congress to be held in that year. As to the time no decision was reached. The resolution was carried unanimously. A second resolution was offered, viz:

Resolved, that the following named gentlemen be appointed a committee of temporary organization, whose duty it shall be to make such a plan for a permanent organization as shall in their estimation best call out universal support.

This was also discussed and carried. The committee named is Drs. Dwinelle, Northrop, Walker, Kingsley, Winder, Hunt, Coyle, Brophy, Levy, Meeker, Southworth, Frank, French, Truman, Peirce and Flagg.

A third resolution was offered and carried, viz.,

Resolved, that this committee be empowered to fill vacancies and enlarge its numbers at their discretion.

This conference was amicable in a large sense, yet there was a free interchange of opinion. While all did not think like in all things, wise measures were strongly advocated, so that it should not appear that there was any disposition to place obstructions in the way of any movement that sought the best good of all.

The meeting adjourned subject to the call of the chair.

GEO. A. MILLS. Secretary of the Conference.

BRIEF MENTION.

IT REQUIRES more judgment, more brains, to properly prepare a cavity than to fill it.—*Dr. J. B. Montfort.*

DON'T neglect the coming meeting of your state dental society; go and take all your professional friends.

THE indications are that the state dental associations in the west will have exceptionally good meetings in 1887.

THE Executive Committees of state societies should work unceasingly from now until their respective meetings take place; everything depends on that committee.

VERMONT BOARD OF DENTAL EXAMINERS.—The next annual meeting of the Vermont Board of Dental Examiners will be held at the Van Ness House, Burlington, March 16, 1887, commencing at 2 o'clock P. M. R. M. CHASE, Secretary.

ONE OR TWO journals are not sufficient to disseminate the views of the leaders in dentistry, hence, every dentist should subscribe for perhaps half a dozen. To receive and read the journals without giving something to the profession is selfish; every thinking person has ideas that are valuable to others.

PROF. J. Y. CRAWFORD, dean of the dental department of the University of Tennessee, was recently caned by the students of that department. Those not personally acquainted with the Dean, might infer that he was either a dude or aged; but he is neither, and we hope that it may be many years before the gold-headed cane becomes more useful than ornamental.

B. J. PRIMM, M. D. is now Association Editor of the *Weekly Medical Review*. Dr. Primm is a young and vigorous writer. The medical Press and Library Association acted wisely in selecting him as editor.

THE VERMONT STATE DENTAL SOCIETY.—The eleventh annual meeting of the Vermont State Dental Society will be held at the Van Ness House, Burlington, Vt., Wednesday, March 16, 1887, continuing three days. Members of the profession at large are cordially invited to attend. An effort will be made to secure free return checks over all railroads, and reduced rates at the hotels.

T. MOUND, Secretary,
Rutland, Vermont.

THE Alabama Dental Association will hold its next regular annual meeting in Tuscaloosa, Alabama on the first Tuesday, (fifth day) in April, 1887, and continue four days. All dentists are cordially invited to be present.

The State Board of Dental Examiners meets at same time and place. Parties desiring to practice in Alabama, must procure license from the Board.

T. M. ALLEN, D. D. S. Sec'y A. D. A., Eufaula, Ala.

R. N. DuBois, D. D. S., President, Greensboro, Ala.

MONTHLY LIST OF PATENTS.—For inventions relating to dentistry, bearing date Dec. 25, 1886. Reported expressly for. ARCHIVES by Louis Bagger & Co., mechanical experts and solicitors of patents, Washington, D. C. Advice free.

353,403. Electrical appliance for dental chairs.—L. L. Deckard, Middletown, Pa.; 354,356. Artificial tooth.—L. T. Sheffield, New York, N. Y.; 354,357. Artificial tooth.—L. T. Sheffield, New York, N. Y.; 354,819. Dental engine.—A. Weber, New York, N. Y.; 354,863. Dental forceps.—F. G. Hughes, Galt, Ontario, Canada; 354,833. Artificial tooth.—C. P. Grout, New York, N. Y. January 25, 1887.—354,976. Dental flexible support.—G. L. Field, Detroit, Mich.; 355,126. Artificial tooth.—C. F. Blake, Sr., San Francisco, Cal.; 356,221 Dental Plugger.—W. H. Baldwin, Norwalk, Conn.

COCAINE IN MERCURIAL STOMATITIS.—Bockhart has found that painting the gums with a 5 to 10 per cent solution of cocaine a few minutes before eating, will enable the patient to eat without trouble or pain.—*Revue des Sciences Med.*, July, 1886

ASK AND YE SHALL RECEIVE.

1. How many dentists give up practising on account of failing health? To what extent are we dependent upon the faithful performance of bodily functions in order that we may practice in our profession?

2. How many operations are slighted because a disordered stomach or a pain in the back claims the attention of the operator?

A sound mind means a healthy body, and the most successful dentist is one in whom both mental and physical functions are performed in a healthful manner.

Is not the subject at which we have hinted one of sufficient importance to dentists, that an effort be made to secure reports from practitioners as to their habits of life relating to hygiene?

G. F. EAMES, Boston Mass.

ANSWERS TO JANUARY QUERIES.

No. 2.—There is no objection to the use of pure aluminium for base plates. If there is any iron in the plate holes will appear in time.—E.

No. 1.—The following manner of making rubber attachment on aluminium has never failed in my hands: "Spur" the surface to be covered with rubber, using a slender-pointed graver held at an acute angle on the plate in order to make long spurs. Make rows of spurs as close together as possible, having the spurs point in opposite directions in alternate rows.—E.

A PHARMACEUTICAL SPECIALTY FOR DENTISTS.

LISTERINE.

FORMULA.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

DOSE.—Internally: One teaspoonful three or more times a day (as indicated), either full strength or diluted with water, or in combination with other drugs. As a local application to ulcers, wounds and abscesses, or as a gargle, mouth-wash, inhalant or injection, it can be used ad libitum, diluted as necessary for varied conditions.

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LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use and to make and maintain surgical cleanliness—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of preventive medicine—individual prophylaxis,

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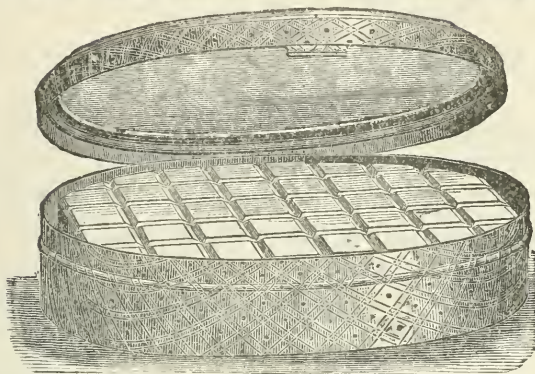
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As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondence as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

The ARCHIVES is not in the least degree controlled by any association or dental supply house, but is independent and published in the interest of the entire profession. The price is reduced from \$3.00 to \$2.00 per year. Those of our present subscribers who have already remitted \$3.00 for this year will have \$1.00 credited on next year's subscription without they otherwise direct. To those that have discontinued or are not now subscribers, we solicit them to sign blank below and mail to us early.

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T. H. E.

Archives of Dentistry.

A MONTHLY RECORD OF DENTAL SCIENCE AND ART.

VOL. IV., No. 3.]

MARCH, 1887.

[NEW SERIES.

ORIGINAL ARTICLES.

"Of all the arts in which the wise excel,
Nature's chief masterpiece is writing well."

IMPRESSIONS AND CASTS.

BY DR. THEODORE LEDYARD, NEW ROCHELLE, N. Y.

Of course, all dentists know how to manipulate plaster for impressions; but while they may know how, it is a fact that some use wax.

Perhaps wax is good in some cases, but it is not always reliable. When in condition to use, the wax will be so soft that in pressing it into place it will be spread out of place, and we are not sure whether our impression is correct or not, while with plaster we are.

A skilled eye can detect in an instant any imperfection in a plaster impression. Wax will draw and we cannot detect it. Suppose it does draw on some occasion, and the patient is sent away to call a few days later for the work, and instead of its being finished, or as much so as expected, the patient calls only to have another impression taken; the embarrassment is not pleasant.

Take small impressions, first with wax then with plaster; make casts and note the difference, both by eye and measurements; then give up using wax. Plaster is absolutely perfect in its results when properly handled, and that is an easy accomplishment.

The very fact that plaster fractures when removed from the mouth is the best argument in its favor, and the replacement of all these pieces is a task simple as the putting together of children's map blocks.

Patients object to plaster when it is handled in a bungling manner, or when it is cold and contains too little salt to facilitate quick setting. And why should they not?

Warm water, proper amount of salt, constant stirring and proper time to use the plaster, are all important points to be observed, and the observance of these will insure success. One impression will be sufficient, and the patient will think you did that well, and that confidence at the outset is a great point gained. Cater to it, "a thing well begun, etc." We all know of the attending perplexities of things poorly begun. Many of our failures we can trace back to the very beginning of the operation.

A child's small table knife is a serviceable instrument for carrying plaster into a high arch before inserting the impression cup, or into a deep, long fissured cleft palate, or around teeth standing alone on the lower jaw. The knife should be small, light in weight, and the blade of such a length and width that will make it a handy instrument, and if it is silvered it will not be objectionable to the eye of the patient. The best instruments we can have are none too good.

The sale of rubber cups for plaster use is good for the trade, but a china or earthen cup with flaring sides and a handle, is best for dentists. The more glazed the vessel the easier the removal of the plaster after it has set, especially if hot water be used. Shellac may be good as a parting medium between impression and cast, but nothing is so handy, clean and quick to use as soap used from the cake with a soft hair brush. Soap can be applied while the impression is yet steaming, and

after using freely then a thorough washing to remove all suds, the cast can be poured, and in less time than if shellac was used, and it is the wasting of time that we should guard against.

From the white casts one sees at the dental depots and dental meetings it would seem that coloring matter is not in general use, although many may use it. A little color (Indian red, dry) put in the water before mixing the plaster will give just shade enough to the cast to detect readily any teeth or pieces that may break and remain in the impression.

AN EFFICIENT AND POSSIBLY NEW (?) DENTAL SPLINT.

BY G. A. BOWMAN, D.D.S., ST. LOUIS.

Having recently been a willing victim to the operation of replantation, I found it necessary to secure firmly the reim-
planted tooth in its cell, for although it was the second right inferior bicuspid with a long root quite deflected at the terminal end, it persisted in rising for an explanation, or something else—whenever the jaws were apart—and therefore had to be forced down again, which made it very sore in time. I reflected a moment and immediately conceived a splint to-wit: Having Melotte's lightning accessories, for taking impressions and making dies, I took an impression of three teeth—the first bicuspid, second bicuspid and first molar—dies were quickly made and a plate of aluminium, gauge 30, stuck up covering a little more than the grinding surfaces of the teeth, which, being dried, this splint was cemented in place with oxy-phosphate. Lo! What a change. The soreness soon subsided, my tooth fixed in its original position where it has nothing to do but re-attach itself. I should advise those who contemplate the operations of implantation, transplantation or replantation to use this splint. In cases of replantation the impression should precede the extraction of the tooth. The dies can be

made in five minutes with Melotte's devices (and every dentist in the world ought to have them) and is ready for securing the replaced tooth. It will be seen at a glance the wide range of possibilities to which this splint may be applied in securing teeth which have been moved to new positions in regulating. Platinum or gold may be used, but aluminium is light, inexpensive and satisfactory.

ALVEOLAR ABSCESS.—OPENING OF THE CHEEK.

BY GEO. L. PARMELE, M. D., HARTFORD, CT.

This case is not given for its rarity, but for the lesson it teaches. Mr. T——, of E., was sent by his family physician, February 27, 1885, to consult me as to a pus-discharging sore on his left cheek. He had experienced uneasy feelings for about two years, in this region of the face, which his dentist attributed to some molar roots, which were extracted with no beneficial results.

In June, 1884, after some severe pain, but no tenderness in any of his teeth, the cheek dimpled, as he expressed it, which was followed by a discharge. Since then he has been trying to convince his dentist that the trouble originated in his teeth, but was answered that the "teeth have no connection with it." Suspecting the left inferior canine in which there was a large and beautifully executed filling, I tested it and found the pulp to be dead. Careful examination of the remaining teeth revealing no departure from health I pronounced this canine the cause of the whole trouble; and he being extremely anxious to get rid of the cause in the most expeditious manner, I advised its extraction; and at the same time told him in what condition he would find the root, and that nature would probably complete the cure.

The fillings in his mouth showed his dentist to be a fine *operator*; while the history of the case suggests that with some etudical education he would be in better condition to do

justice to his patients. The following letter gives the remaining history of the case :

DR. P—————*Dear Sir:*—Yours of the 27th at hand. The tooth in question was upon the left side of the lower jaw. You will remember that an excrescence had formed along the outer side of the jaw, not beside the tooth, but farther back; and that it gave me no great trouble for a long time—perhaps two years—but at length it increased so much as to give a swollen appearance to the cheek, to which it soon became connected; and by this means the pus made its way through the cheek to the surface. This was the condition of things at the time I consulted you. I had several times spoken of it to my dentist, who was confident the trouble did not proceed from the tooth, because the excrescence mentioned above seemed in no way connected with it, being, as I said, located farther back upon the jaw. Even after I had told him your opinion he seemed skeptical; but on removing the tooth, said, “Dr. P———— is correct on one point—the little bag is here.” You had said there would be a little bag or pouch attached to the root of the tooth, not at the extremity, but upon one side. This was what he referred to. There was no discharge from the cheek after removal of the tooth, but for some two or three weeks there were occasional discharges into the mouth through the orifice formed by extracting the tooth—these discharges being quite unpleasant in taste and odor. I found comfort in frequent rinsing of the mouth with water.

The excrescence on the jaw rapidly disappeared, together with all soreness of that part; but for some time afterward an upward pressure of the finger upon the bottom of the jaw caused sensitiveness; it was, in fact, the last spot to get well.

The connection between the excrescence on the jaw and the cheek has never quite departed; and in healing, has contracted in such manner as to create a small dimple in the cheek; at the bottom of which is a slight scar. Both will doubtless be permanent, but hardly amount to a disfigurement; indeed would scarcely be noticed except when the face is smoothly

shaven. For quite a long time my jaw has been sound and as serviceable in masticating food, etc., as the other.

Yours very truly,

T.

E. SEPTEMBER 30. 1886.

CAPILLARY ACTION IN PRACTICAL DENTISTRY.

D. W. FELLOWS, M. D., PORTLAND, ME.

Capillary action results from the relation existing between the forces of cohesion and adhesion.

It causes water or other liquid to rise and remain above its level in small tubes or spaces, the walls of which the liquid is capable of wetting. Different liquids rise to different heights, but any liquid will rise to a height proportioned to the fineness of the tube or space.

Instances of capillary action are seen in the rise of the oil in a lamp-wick and in the absorption of water by a sponge.

In practical dentistry we constantly employ this principle, as in sponging a bleeding surface, or removing blood or other fluids from the mouth. We utilize it, too, when we insert napkins, cotton or bibulous paper in the mouth to absorb and hold the moisture while filling a tooth, and in drying cavities with cotton or paper. Absorbent cotton acts quickly, because the surfaces of the fibers, having an attraction for the fluids, are readily wet.

The flowing of substances over a surface depends upon the same law which controls capillary action; namely, adhesion. Alcohol touched to the surface of a cavity for drying it, flows quickly over the surface; and zinc chloride or solution of gutta-percha used for pulp-capping, or cavity-lining, illustrates the same law. Wood absorbs water by capillary action and swells, as used in the wedging of teeth. In soldering the principle of capillary action should be constantly borne in mind. The flux will flow most quickly into the smallest spaces, and when the surfaces are heated equally the solder will also be drawn into capillary spaces and around points of contact.

In the insertion of fillings without the rubber dam, this action of the fluids must be carefully guarded against.

A RE-UNITED TOOTH.

BY J. W. WICK, D. D. S., ST. LOUIS.



On January 28 Mrs. M. called at my office with her daughter, a child of ten years, who, she said, had been suffering for two weeks with an ulcerated tooth, and as she had kept the family awake the night before on account of it she wanted the tooth extracted at once.

Making an examination, I found the gums in an inflamed condition, and a well developed case of alveolar abscess.

The tooth, a lower lateral, presented a very peculiar appearance; its cutting edge coming in contact with the lip.

In answer to questions, the mother stated that about two years previous, the child had been thrown from a tricycle, and falling upon her face had knocked this tooth loose, inclining it inward. In attempting to straighten it, the tooth was forced outwards toward the lip.

The child protested so violently against any further attempts to replace it that they decided to let nature take care of the case.

She complained of soreness in the tooth, but this soon passed away, and it gave her no further trouble until about two weeks before I saw her, when she complained of toothache in the crooked tooth.

I removed it, and found that the tooth had been broken off at the neck, and that perfect union had taken place between the root and crown.

CORRESPONDENCE.

AFTER THE SHOWER.

NEW YORK CITY, February 4, 1887.

EDITOR ARCHIVES.—The regular clinic of Tuesday was in marked contrast to any others during the last twelve months. It was ebb tide, the waves having gone over us. The energy seemed spent, and those who dropped in made up a sort of inquiry meeting. We notice that these clinic days are fixed upon by many of the out-of-towners as trade days, and the dental depots do not lose anything by the event. In many instances we meet dentists from long distances, and they tell us that they had made it a point to visit New York at this particular time. We met Dr. Dickinson, of Iowa, who was at the big campus. He seems to be a live man. He favored us with a very pleasant call, and we found him keenly on the alert. He bid us good-bye for a first visit—in many years—to New England, his native land, and a good breeding place for live men and dentists. We do sincerely believe that an exported Yankee does improve by the change, particularly if he has the germ of development well impregnated with good purpose.

We met a real good fellow from Yankeedom at the anniversary meeting of the First District Society, and we have long thought he had a glaring defect, and we found out what it is. A very bright lady made the discovery. She said he was a good deal of a man with a vast deal of littleness. "Who maketh us to differ?"

On Tuesday evening we hied away to the regular meeting of the First District Society with the expectation of meeting Dr. Sudduth, of Philadelphia, but found that Dr. George W. Allan had the floor with Dr. Sudduth's paper on "The Retrogressive

Metamorphosis of Tooth Structure." Dr. Sudduth is at present in Berlin, Germany. We hope the Miller will not take all his grist for toll. That would not be a good culture.

The last meeting of the First District Society evidenced the lack of "stored radiancy," by the falling off of numbers, particularly the old men. A certain few of these men have a chronic habit of coming late, looking around for their mates, then putting their heads together and scattering early, going out of any of the three outlets of the room, singly or in groups. Doubtless they have followed the trite motto so long that they come to regard it impossible to resist, "early to bed and early to rise make a man healthy, wealthy and wise." This scattering was quite noticeable at this meeting, so the young fellows had it mostly their own way. The gray beards did not go out, however, until the report of the executive committee on the anniversary meeting was read by its chairman, Dr. Walker. This report embodied a glowing clause from the *Cosmos* editorial. A motion of thanks-giving to all who had anything to do with the anniversary meeting was adopted, and without any mention of the colored janitor, who was on duty at any and all places during the anniversary. He figures in an extensively gracious manner at all the regular meetings, by taking especial care of the clothing of the scientific members. This janitor was honored by being Youngered with an implanted superior central incisor, supposed to have been the first operation of the kind in New York. It is a pronounced success to-day. He was visited by hundreds during the big parade. This honor is doubtless the effect of the emancipation of the colored men and the fifteenth amendment, as before this, colored men had no rights. It was a grand opening for Dr. Younger. All who make their journey to the great dental Mecca of S. S. White & Co. will call for the black man with the white tooth, and the glory of California will pass into the records of coming generations—if it proves to be a success. We hope it will; and it will if retrogressive metamorphosis does not set in.

This brings us to the subject of the February meeting. The

paper was well presented by Dr. Allan, with eight illustrations of good size in crayon, these illustrations showing the effects of traumatic lesions in the elephant's tusk. The paper was very lengthy, but exhibited earnest study and large observation, and did credit to the author. Dr. Atkinson being called upon said it was a paper that needed a good deal of painstaking sifting, and that a sieve was needed to do it, and, said he, "who has it?" He praised the author of the paper for his evident industry in a grand and fruitful field, and said that Dr. Allan had done his part in a very creditable manner. Dr. Abbott battledored and shuttlecocked the paper and the author quite gracefully, saying that he had given evidence of some growth since last year's meeting; and that if his visit to Berlin had brought this about he hoped he would remain there long enough to do still better. The evidence of his growth, Dr. Abbott said, was his acknowledgment of some organic material in the enamel, and he proceeded to read extracts from Dr. Sudduth's remarks at the last year's anniversary meeting to illustrate his point.

Dr. Allan stated that the fundamental idea of Dr. Sudduth's paper was to show only—and neither speaker had recognized the fact—that a traumatic lesion which only disturbed the territory of the pericementum—as shown in the illustration—produced an entirely different result than it would have done had it entered the pulp. He said that the theory of the paper was intended to and did deny the Heitzmann theory of a reticular structure, and this necessarily carried the inflammatory theory with it.

The young men were largely in attendance, and to their credit they remained until the end of the discussion, and gave earnest attention. It is a noticeable fact that the First District Society is growing up a band of good listeners, and some of these will yet answer the question so often heard by would-be distinguished men, "What has all this so-called scientific display to with dentistry?" When we remember that it is but a little while since when Dr. Bodecker was reading his paper on pericementitis from a histological point of view before this

society, the presiding officer fell sound asleep, and a motion was made that the paper be discontinued as it was a doubt in the minds of not a few whether the subject had much, if anything, to do with practical dentistry, the doings of those days show to the erudite mind the contrast of then and now.

Elderly men begin to drop from the line. Dr. Clowes' resignation as an active member was received and accepted. The time will come for all to step down and out. But if such a resignation means inactivity, we think it better and nobler to die in the harness.

Dr. Ewing, one of our promising young practitioners, has departed from us prematurely. We say to young men, be wise in caring for your health.

February 25, 1887.

The Gaylord case is decided, viz. The Richmond Crown is lost to Sheffield. The Bridge, also Low Crown, is gained by him. This I had from Mr. Gordon yesterday. Conclusion: Does this not look like the point gained in the Good-year case. Judge Curtiss, of New York, gave a decision in its favor, which, as is well known, stood as a precedent for all others until it was set aside, but this came so late it virtually amounted to nothing. The money had been made out of the dentists by persecution largely. Lawyer Dickinson, of New York, managed that case all through, and is the manager for Sheffield. Moral: It looks much like a dog of the same color. More anon. What next? This will be a nice dental earthquake under a low bridge. These have been a curse in railroading. More shocks soon. OBSERVER.

BROOKLYN DENTAL SOCIETY.

BROOKLYN, N. Y., March 1, 1887

EDITOR ARCHIVES: The last two meetings of the Brooklyn Dental Society have been of more than usual interest and profit, and a short notice of them may be worthy a place in the ARCHIVES.

We were glad to welcome to our first meeting of the year Dr. Rollo Knapp, who came from the metropolis of the South, and who proceeded to take the conceit out of us by exhibiting his perfect specimens of tooth crowns and bridge work and by demonstrating the exactness of his methods of manipulation.

So many new crowns have been presented to us during the past year, claiming advantages over every other crown, that the subject had become somewhat thread-bare, but when Dr. Knapp presented his claims and his specimens, interest revived and admiring glances soon found expression in words of highest praise. The Brooklyn Dental Society congratulate themselves that they were able to secure the doctor's presence for an evening, and the benefit of his clear-cut description of his methods, and then to watch his practical demonstration of its real simplicity.

It is many a month since we have spent so interesting and profitable an evening, one in which we felt that every word had a direct bearing upon the practical work of our profession. The greater part of our membership were present and gave earnest expression to their gratification. The usual vote of thanks was given with a will, and a sum of money was appropriated to give the doctor a slight testimonial of the esteem in which he would ever be held by his professional brethren in Brooklyn.

The call for our last meeting brought together a good number of our members from New York as well as Brooklyn to listen to a lecture upon "Histology" by Dr. Daniel Ayers of this city. All who knew the doctor came expecting a treat, and none went away disappointed. Dr. Ayers, in spite of the years indicated by his whitened locks, and the fact that for the last quarter of a century he has been one of the leaders of his profession in these two cities, has still the vigor and enthusiasm of a young man. As a histologist and a microscopist he is a recognized authority, and will always command attentive listeners.

The doctor declaimed against a servile acceptance of what is found in the text-books and taught in the schools, and urged

all to look, think and prove facts by personal demonstration. Never accept an assertion of fact or theory until you can show why it is true yourself. His ideas in regard to pneumonia and other usually considered serious inflammations, may be gathered from a story related of a celebrated professor in Dublin. In a lecture to his class upon fevers, he says: "Often times in your experience with fevers you may find that pneumonia will intervene, but you need not worry about that; no harm will come of it, unless you should discover it and undertake to treat it."

From this one might understand that the terrible fatality of this dread inflammation must be laid up against our physicians.

Dr. Atkinson, who is still one of our most active members, and who is known almost as well in the West as here at home, discussed some of the theories laid down by Dr. Ayers, in his happiest vein, and all matters of importance found the two in accord. May our next meeting equal the last in interest.

W. H. JOHNSTON.

CHICAGO LETTER.

CHICAGO, ILL., March 21, 1887.

EDITOR ARCHIVES—The first annual meeting of the Chicago Dental Club was held on January 24 at the Tremont House and was largely attended. The essay of the evening was presented by Dr. J. Austin Dunn on "Salivary Calculus and its Effects upon the Oral Tissues," and was the means of bringing out an interesting and prolonged discussion, and which, by vote of the club, is to be continued at the next meeting.

The annual report of the Secretary showed a healthy condition of the club, which now numbers nearly forty members who are mostly young men.

The election of officers resulted as follows: President, Dr. L. P. Haskell; vice-president, Dr. John S. Marshall; secretary,

Dr. Arthur B. Freeman; treasurer, Dr. E. M. S. Fernandez; business committee, Dr. Eugene S. Talbot, chairman; Dr. I. A. Freeman, Dr. Chas. P. Pruyn.

At the regular meeting of the Chicago Dental Society held February 1, two essays were presented on "Irregularities of the Teeth." The first by Dr. Garret Newkirk, the other by Dr. W. B. Ames.

The committee of ten appointed by the society to confer with the committee appointed by the First District Dental Society of New York in relation to the organization of an International Dental Congress were discharged, the recent action of the New York Society making such a committee superfluous. By vote of the society all reference to the matter was ordered expunged from the records. Thus the ghost was laid. "*Requiescat in pace.*"

We were informed the other day that our genial friend, Dr. A. J. Swasey, president of the Chicago College of Dental Surgery familiarly known among the "boys" as "Pop," was soon to open his new house and office for the inspection of his professional friends. It is said to be one of the finest and best adapted for its purposes of any residence in Chicago. The profession are anxiously waiting to receive their invitations that they may have the pleasure of admiring the appointments of which so much has been said.

During the past two weeks we have received several calls from Dr. Adair, of Georgia, who has been on a trip North for the purpose of learning what he could, that was new or useful, and at the same time imparting, if he could, any special knowledge which it might be his good fortune to possess and which would be of benefit to his brethren in the profession. We were particularly interested in his method of treating or rather dressing cases of pyorrhea alveolaris; the surgical treatment is the same as that generally adopted, but the parts are afterwards dressed, by filling the pockets first, with the following:

R_x Iodine crystals.

Wood creasote aa q.s. to make a saturated solution as thick as honey.

The surplus is then taken up with pledgets of cotton and the pockets again filled with the following remedy and allowed to remain :

R_x Tannic acid crystals.

Glycerine q.s. aa to make a thick paste.

The patient is then dismissed with the injunction to return in twenty-four hours, and in the meantime is forbidden to use the tooth brush. On returning the process of brushing and cleansing of the teeth is done under the supervision of the operator, and for two reasons, first, that the dressing last applied may not be disturbed and thus prevent the ingress of foreign substances into the pockets, and, secondly, that the brushing and cleansing of the teeth may be done in the most careful and thorough manner under the personal observation of the operator.

This plan of treatment is carefully followed out every day until the pockets have healed and closed up.

The first prescription is used for its mild escharotic and its stimulant effect, while the second one is used for its astringent effect, and also as a mechanical dressing, the tannic acid uniting with the albumen in the effused serum forms a tannate of albumen, and thus seals up the pockets.

The method is certainly worthy a fair and unprejudiced trial. We have not yet had sufficient experience with it to give an opinion, but it certainly, as Father Atkinson would say, "commends itself to our inner consciousness."

The brushing and cleansing of the teeth once per diem under the eye of the operator will in most cases prove of great benefit in the treatment of such cases, for few, very few patients perform this part of their toilet in a satisfactory manner at any time, and much less so when the teeth and gums are sore from the effects of disease.

Yours fraternally,

DENTATUS.

EDITOR ARCHIVES.—Will you allow me to request those of your readers who will assist in the dental and oral section of

the International Medical Congress to furnish me with an abstract of their papers or the papers, themselves at once?

These papers must be in the hand of the secretaries as soon as possible in order that a definite programme may be arranged and a proper amount of time apportioned for each subject.

E. A. BOGUE, Sec'y

29 East 20th street, New York City.

A CONVENIENT AND CERTAIN MODE FOR TEMPERING STEEL.—Mr. James A. Peck, of Brewsters, N. Y., mechanical engineer of the N. Y. Condensed Milk Co., gives us the following method discovered by him, and which he uses with great success for tempering all kinds of tools, knives, razors, steel dies, and other implements.

Take a suitable quantity of muriatic acid; dissolve all the zinc the acid will take.

Prepare a tempering bath composed of one part of the above zinc-acid and one part water.

Heat the steel according to its hardness.

If high or hard steel, heat until just red and then temper in the acid-bath.

If low steel, heat it as hot as you would to temper in water, then temper in the acid-bath.

After immersing in the acid-bath, cool off in water.

For lathe and planer tools draw no temper; but for other tools draw temper. Unlike water tempering, the colors that appear under this method give no clew to the hardness.

By this process, steel is readily hardened to any desired degree, and may be made to cut glass like a diamond.

If desired, an acid-bath composed of two parts of muriatic acid and one part water may be used. Mr. Peck, however, prefers the zinc-acid, as being more dense.

A prominent advantage of this method of tempering is the certainty of its results. It never fails to yield the temper required. It can be relied upon for every description of steel or tool.—*Scientific American*.

EDITORIAL.

IN NOVEMBER last the ARCHIVES published a letter from a New York correspondent in which an allusion was made to an article that appeared in the *Items of Interest* for May under the heading, "Was it Honest?" This letter called out a reply from Dr. Kingsley, which appeared in the December number of the ARCHIVES. Soon after taking the charge of this journal in January, we received Dr. Allport's reply to Dr. Kingsley, which as an act of courtesy was published in our February issue. Being decidedly opposed to the introduction of personal matters into our dental journals, we sincerely hope there will be no more of this controversy. All correspondence of this character for the ARCHIVES will be refused hereafter. The American Dental Association, of which body Drs. Allport and Kingsley are honored members, adopted a code of ethics. Article II, Sec. I, of this code reads as follows: "A member of the dental profession is bound to maintain its honor and to labor earnestly to extend its sphere of usefulness. He should avoid everything in language and conduct calculated to discredit or dishonor his profession, and should ever manifest a due respect for his brethren." To what extent these members are amenable under this article of the code we are not prepared to say. Judging, however, from the tone of their correspondence, the spirit of the code has not been very closely observed by either gentleman.

ANNUAL MEETING OF THE MISSISSIPPI VALLEY DENTAL ASSOCIATION.

We are indebted to Dr. Wm. N. Morrison for the following items regarding the forty-third annual meeting of the above named association, held on March 2, 3 and 4, 1887.

The meeting was called to order by President Dr. E. G. Betty, with Dr. A. G. Rose as Secretary, a large number of dentists being present.

After prayer by Dr. J. Taft, the morning session was opened by the reading of a historical sketch of the association by the president.

We give a few brief extracts of this sketch. Dr. Betty said that half a century of busy years have passed since the first gleam of light shed its rays upon the waste of waters, and what was then not more than a mixture of callings of the barber and the jeweler, is now a distinct and noble profession, having for its aim an important part in the economy of the noblest work of God.

The first convention of professional dentists of which a record has been kept was held in Cincinnati on August 13, 1844. The list of delegates present included a number who have since grown famous as the pioneers of the present organization. The constitution adopted at that meeting included a clause which stated that they deemed it expedient to form an association for the purpose of mutual improvement.

The final organization was completed by the election of Jesse W. Cook, of Cincinnati, as President, and the first essay read was by the lamented James Taylor, upon "Medico-Dental Education."

In 1845 Dr. Challen offered a resolution to the effect that the improvements known to the dental profession be regarded as common property, and in the following year Dr. Wm. B. Ross delivered an address upon the propriety of patenting new remedies and discoveries.

At the meeting held in 1846 the idea of publishing a dental journal was conceived, and the *Register* is the result of a resolution presented by Dr. Edward Taylor.

Of the number present at the organization of the society but four survive: Dr. John Allen, of New York; Dr. Charles Bon-sall, Dr. Wm. M. Hunter and Dr. A. Berry, of Cincinnati.

The afternoon session opened with the reading of an interesting paper on "Nutrition," by Dr. O. M. Wright, D. D. S.

The second day, morning session, Dr. Geo; W. Keely read a paper on the "Irregularities of the Teeth." The lecture was fully illustrated by diagrams and specimens. A resolution was adopted asking him to publish a book containing the result of his investigations for the benefit of the profession.

Dr. W. A. Dunn, of Cincinnati, read a paper on the Relations of Medicine to Dentistry.

At the afternoon session Dr. W. Storer How, of Philadelphia, exhibited an oxyhydrogen blow-pipe, and also appliances for crown and bridge work, impression cups and gold-lined vulcanized plates. The electric motor for running dental mallets was discussed at length.

The third day the business of the association was concluded by electing the following officers to serve for one year: President, A. W. Harlan, of Chicago; First Vice-President, W. N. Morrison, of St. Louis; Second Vice-President, M. H. Fletcher, of Cincinnati; Secretaries, F. W. Sage and A. G. Rose, of Cincinnati; Treasurer, F. A. Hunter, of Cincinnati.

Resolutions on the death of Drs. Osmond and Ullery were adopted.

It was decided to offer a prize of \$25 for the best essay presented at the next meeting, the subjects to be chosen by the Executive Committee. The Association adjourned to meet in Cincinnati the first Wednesday in March, 1888. H.

THE DENTAL SECTION.

I have just read an abstract report of Dr. Kingsley's "After Dinner" remarks at the anniversary banquet in New York, and it does one's soul good to find a man of his prominence who has the manliness and courage to "eat his own words," or recede from what seemed to be antagonistic to the organized efforts of those deeply interested in the Dental Section of the International Medical Congress.

President Taft is untiring in his efforts to make the section a grand success, and is entitled to the support of every repre-

sentative dentist, and let us rejoice with him to see the evidences of hostility or even luke-warmness passing away.

When opportunity offers, let the enterprise have financial as well as moral support, for no work of such magnitude can be conducted without ample funds. Join hands! and our section can command the place its importance and rank demands. P.

CAUTION IN GIVING ANÆSTHETICS

MUCH GOOD ADVICE is given in a short sketch in "*Items of Interest*," by Dr. L. W. Bristol, of Lockport, N. Y., in which he strongly urges all who practice dentistry, especially those beginning, never to give an anæsthetic to a patient unless there is a third person present. He says but for that fact, at one time he might have been an inmate of a prison-cell—through the influence of chloroform upon the patient and at another time, after extracting two teeth for a young lady, she on her way home with her brother, was thrown from her carriage and found insensible in a gutter by the road-side. A short time after, the same young lady and her brother entered complaint against him for injuries arising from taking chloroform and having the teeth out mentioned before, but at the same time they neglected to speak of the accident which happened on their way home, which accident, however, Dr. Bristol did remember and thereby saved a law-suit. He closes with this remark: "We owe it to ourselves to be careful of our reputation." S.

EULYLYPTOL.

A mixture of salicylic acid six parts to one each of carbolic acid and eucalyptol, which he calls Eulylyptol, Dr. Schmeltz considers a better antiseptic than iodoform, corrosive sublimate or carbolic acid. Urine to which a small quantity was added was kept for months. G. L. P.

[In Urine the corrosive sublimate would rapidly precipitate

and so would prove unreliable as an antiseptic. We doubt, however, if Eulylyptol is a "better" antiseptic than pure iodoform. Ed.]

A CASE—WITH GELSEMINUM TREATMENT.

Miss H., age 16, presented in form of facial neuralgia, left side. Pain not intense, but steady and dull, especially at night or when much fatigued. The whole side of the face, from the terminal points of the nerves in the chin to, and involving the ear and portions of the scalp, were affected. The teeth were soft and much decayed, but no one seemed to be the cause of the disturbance. The pain was of several days duration, growing gradually worse. Local treatment in the case of a somewhat suspicious inferior bicuspid failed to afford relief. Became convinced that the source of the trouble was constitutional and resorted to gelseminum treatment, with prompt success. Ten (10) drops of a reliable tincture were added to four ounces of water, and one teaspoonful of the mixture was taken every hour from about 2 o'clock until 10 p. m. When sleep followed for the rest of the night; the first for several days previous. The next day revealed marked improvement; the neuralgic pains and soreness of scalp, etc., had almost entirely disappeared. The case was clearly one of *chlorosis*. The work upon the teeth was suspended with the advice that she consult her physician. She did so,^c and was placed upon iron and phosphate treatment with^m marked improvement constitutionally.

In my judgment the neuralgic pains arose from an irritation of the nerve centers, caused by the chlorotic condition of the general system. As far as I could learn, this condition was hereditary. Menstruations were usually profuse. The "greenness" so characteristic of the chlorotic condition was very marked.

The practical question here is as to the conditions when gelseminum is indicated. In my judgment it is indicated when there exists an irritation of the nerve centers, or a part, simply. Never in case of congestion. S.

COLLEGES.

COMMENCEMENT EXERCISES, AND BANQUET OF ALUMNI OF OHIO COLLEGE OF DENTAL SURGERY.

The forty-first annual commencement exercises of the Ohio College of Dental Surgery were attended by an audience that completely filled College Hall. The programme arranged for the occasion embraced some pleasing musical selections, and addresses by H. P. Lloyd, and a class oration by Mr. H. C. Matlack. An appropriate address was delivered by George W. Keely, President of the Board of Trustees, who conferred the degree upon the following graduates:

A. W. Black, L. A. Brown, L. E. Custer, L. E. Day, G. H. Doulton, W. F. Edmonds, J. S. Emery, J. W. Fisher, C. H. Green, jr., E. S. Griffis, M. A. Hadcock, B. C. Hinkley, T. L. Johnson, E. S. Keefer, Miss M. L. Leininger, C. H. Martin, E. S. Mathews, H. C. Matlack, E. J. McCartney, B. A. McGee, C. E. Miles, A. H. Millman, B. A. Mosbey, W. W. Reed, F. L. Rice, J. M. Rutherford, E. J. Schwartz, James Silcott, J. J. Werner, Switzerland.

The prizes were awarded by Prof. H. A. Smith, Dean of the Faculty, to the following: L. E. Custer, of Ohio, first and third prizes; C. E. Miles, of Ohio, second prize. H. T. Smith, of Cincinnati, received the junior prize.

At the conclusion of the regular exercises, the Faculty of the College, the graduates and a large company of invited guests partook of an elegant banquet at the Hotel Emery. The menu was excellent, and was served with exquisite taste. The occasion was graced by the presence of a number of ladies, who added to the brightness of the handsomely decorated tables. There was no regular programme of toasts, and

the affair was rendered more "enjoyable through the lack of long cut-and-dried speeches.

ALUMNI ASSOCIATION OF MISSOURI DENTAL COLLEGE.

March 2, 1887, a number of graduates of the Missouri Dental College met at Dr. G. A. Bowman's office and formed the above named association. The following officers were elected to serve during the ensuing year; President, Dr. G. A. Bowman; Vice-President, Dr. Henry Fisher; Secretary, Dr. J. W. Whipple, 29th. and Lucas avenue, St. Louis; Treasurer, Dr. A. H. Fuller; Executive Committee, Drs. W. H. Eames, John G. Harper and Henry Fisher. The annual meetings of the association will be held on the day of the commencement of the college. All graduates of the college are requested to send their names to the Secretary. The objects of the association are to unite fraternally the reputable alumni of the college and have an annual reunion.

H.

INDIANA DENTAL COLLEGE.

At the eight annual commencement, held March 2, 1887, the following graduates received the degree of Doctor of Dental Surgery: L. G. Bell, Charles Woelz, Jno. E. Carmon, Jno. H. Evans, S. Oliver, J. J. Lickly, T. J. Hood, S. N. Blackledge, Milton Lamb, John H. Bird, Jas. W. Bates, W. N. Easton, Geo. Marbach, P. W. Earhart.

NEW YORK COLLEGE OF DENTISTRY.

The twenty-first annual commencement of the New York College of Dentistry took place in Chickering Hall, March 9, 1887. The degree of Doctor of Dental Surgery was conferred upon the following graduates by M. McN. Walsh, Esq., President of the board of trustees:

James Charles Alker, George Sumner Burt, Gregorio Santos Benet y Llata, M. D., Samuel Skinner Brown, Valentine Edw. Norman Cook, Thomas Alfred Clawson, John Harvey Crane, John Richard Crawford, John Clayton Downs, Frank Perry Denny, George Anthony Dow, Frank John Eversfield, William Eyebel, Samuel Hassel, Jr., Erastus Otis Houghton, Spencer Cone Hamilton, Paul William Hiller, Halstead Pell Hodson, Ira Daniel Horton, Samuel Porter Hopkins, Leo Frederick Hugle, Frank Alfred Katzmeier, Samuel James Kennedy, Louis Charles Leroy, Frank Butler Longenecker, Edwin Parker Marshall, Francis Joseph McLaren, Ferdinand Moith, Henry Middleton, Lorenzo Noa, George Edward Nearing, Arthur German Rouse, Franklin Willard Rodgers, Dudley John Russell, Horace Reynolds, Felix Edmond San Fuentes, Ph. B., Thomas Howard Stevens, Charles Harvey Smith, Harold Slade, Preston McCready Sharp, Richard James Secor, Walter Lincoln Scofield, Joseph Daniel Sayre, George Joseph Taylor, Daniel Webster Valentine, Walter Woolsey, Herman Eugen Albert Wichert, George Mortimer Whitfield, John Van Pelt Wicks, Ulysses Grant Woolley and Leonhardt Eichbery Zuchtman.

Prof. Feneuil D. Weisse, M. D., had the pleasure of awarding the prizes. The valedictory was delivered by Geo. S. Burt, D. D. S., of the graduating class. The address to the graduates by W. A. Purrington, Esq. The music was furnished by the Seventh Regiment Orchestra, C. A. Cappa, Director. The number of matriculates during the past session, one hundred and ninety-three.

DENTAL DEPARTMENT UNIVERSITY OF IOWA.

The fifth commencement of the dental department of the University of Iowa was a marked occasion in University annals and a real red letter day in the school's calendar.

Dr. Ingersoll, Dean of the Faculty, was the president of the evening. After the invocation by Rev. G. W. Brindell, of the M. E. Church, came music by the orchestra. Hon. W. W. Dodge

of Burlington, state senator from Des Moines county, on behalf, of the faculty, delivered the annual address, "An Eye for an Eye and a Tooth for a Tooth." The valedictory address by Miss Jessie Ritchey, of Onawa, in behalf of the graduating class. Miss Ritchey took as her subject, "The Successes of Dentistry;" she has the honor of being the first lady graduate of the dental department of this university. Dean Ingersoll presented the class to President Pickard who, after a very brief address, conferred upon the following class the degree of Doctor of Dental Surgery and the diploma of the University:

C. W. Aydelotte, H. N. Edwards, L. S. Field, E. T. Giddings, E. S. Glasier, T. J. Glenn, C. H. Hare, F. A. Hefner, J. H. Johnson, J. J. Little, W. A. Maxwell, R. McNutt, J. A. Neil, Jessie Ritchey, F. M. Shriver, H. W. Shriver, J. W. Soule, Joseph Stott, W. R. Tipton, H. M. Vawter, J. B. Vernon, D. P. Wetzel, Alfred Wood, A. M., Geo. B. Yergey.

After the exercises, the class banquet was celebrated in the spacious dining room of the St. James. The banquet in main over, Dr. J. J. Little, of the graduating class, took charge of the further proceedings, and toasts and responses were given.

MISSOURI DENTAL COLLEGE.

The twenty-first annual commencement of the Missouri Dental College was held at Memorial Hall, Thursday evening March 3d, 1887. The following named gentlemen received the degree of Dr. of Dental Surgery: Clive H. Bartlett, Missouri; Howard M. Combs, California; Edward G. Ellis, Missouri; James S. Meng, Missouri; Albert E. Nichols, California; Maurice W. Pearson, Missouri; Sidney J. Smith, Missouri. Dr. Howard M. Combs was awarded the S. S. White Dental Mfg. Co.'s prize, a set of Varney pluggers, for best general examination, and Dr. Maurice W. Pearson the St. Louis Dental Mfg. Co.'s prize, a dental lathe, for best artificial denture.

SOCIETIES.

CONNECTICUT VALLEY DENTAL SOCIETY.—The next semi-annual meeting of the Connecticut Valley Dental Society will be held at Montreal P. Q., July 19 to 22 inclusive.

Extra exertions are being made by the executive committee to make this meeting attractive, and a feast of "good things" is in preparation. The arrangements already made indicate it will be *the* meeting for the East, during the coming season.

Prof. G. V. Black, M. D., D. D. S., of Jacksonville, Ills and Prof. Chas. Mayr, of Springfield, will be the guests of the society, and will present subjects of special interest to the profession. Interesting papers are also promised by Prof. R. R. Andrews, of Cambridge, Drs. James McManus, of Hartford, Geo. A. Maxfield, of Holyoke, F. F. Trestler, Geo. W. Beers and Geo. H. Weagert, of Montreal.

The programme will be arranged with special reference to its being one of the vacation months in which the meeting is held, and will combine business and pleasure in such a manner as to be profitable to all. Meetings will be held in the mornings only. The afternoons and evenings will be devoted to excursions, social pleasures, etc.

Excursions will be arranged to different points of interest in and about Montreal. These will be under the management of a committee of our professional friends of that city. To say that Dr. Lovejoy is chairman of that committee, is a sufficient guarantee that nothing will be left undone that will add to the comfort and pleasure of all.

A particular request is made that all attending the meeting bring their Wives with them.

Special rates to those attending have been promised by the railroad companies.

A cordial invitation is extended to all members of the profession.

GEO. A. MAXFIELD, D. D. S., Secretary.

Holyoke, Mass., March 1, 1887.

SELECTIONS.

EDWARD HUDSON.

Edward Hudson was born in Ireland in the year 1772, and left an orphan at an early age. Upon the death of his parents, a cousin, who was established in Dublin as one of the most prominent dentists of that city, adopted young Edward as his son, and soon after entered him as a student at Trinity College, where he prosecuted his studies with such ardor and success as delighted his benefactor, who was a man of great attainments. Hudson pursued the practice of dental surgery in the office of his relative, and "rose rapidly in qualification for his chosen profession on which his future eminence was then confidently predicted."

While at college Hudson was a member of several of the debating and other societies established about that time (1795), and soon became prominent in these connections. Here he knew and was intimate with many of the most distinguished men of the day and country, among them the Emmets, the Shears, the Corbetts, and Moore, the poet.

With the latter he was especially familiar, and the friendship then formed between them ceased only with life.

The societies of which he was a member at length became so open and liberal in their treatment of those political and social questions which were then agitating all Ireland and threatened disastrous consequence, that the Lord Chancellor, Clare, dissolved them, and ordered the banishment of such of their members as were most obnoxious, from their pronounced views to the government. Hudson at this time escaped the hand of authority; but immediately compromised himself still further by joining the society of United Irishman, an association so

distasteful and dangerous to the home government that the greatest vigor and relentless severity were manifested by it in the pursuit and punishment of the members. With many others, Hudson was seized, and imprisoned in Fort George, Scotland, where he remained until the peace of Amiens in 1802. After being released he came to America.

He began the practice of dentistry in Philadelphia in 1805. At that date Mr. James Gardette was the only dentist of repute in that city, and had attained a very high reputation. Hudson's professional progress was, at first, slow; part of his thoughts and time being engrossed with some business enterprises in which he had engaged. But these ended disastrously leaving a burden of debt, from which, on a percentage being paid them, the creditors gave a full release of the remaining amount. It is characteristic of Hudson that he, in spite of this release, eventually paid, from the income of his professional practice, all that part of the original indebtedness, with interest, for which he had received the release.

Once freed from the shackles of commercial pursuits, Hudson soon attained great eminence in his profession. The peculiar kindness, honesty and uprightness of his nature gained him hosts of social friends; and his skill as a practitioner drew to him so many and such patients that he acquired a competence. Harris says that by his patients he was idolized as few of his professional brethren can ever expect to be." Hudson's standard of excellence in dentistry was not only high, but for the time somewhat novel. Parmly (E.) says of him: "We are probably more indebted to his success than to that of any other man for the importance which was attached at that period to operations which were intended to preserve the natural teeth in their natural state." For, "by the complete success attending the practice of this great man, the public were soon convinced that teeth could be saved"—instead of being extracted. The surgical department, embracing all required operations on the living tooth, was as well understood, and as perfectly and thoroughly practiced by Hudson

as by any operators, who ever lived, either before or since that period."¹

[In February ARCHIVES we gave a fac-simile of a dental bill presented by Edward Hudson in 1825, hence we give this short history of him, taken from "A History of Dental and Oral Science in America." Ed.]

AN OVERDOSE OF COCAINE.

Grave symptoms due to acute intoxication from the hypodermatic use of cocaine have not hitherto been frequently observed. Dr. Ramsden places on record, in the *Australian Medical Gazette*, the following case: B. C—— had been suffering from neuralgia caused by a defective tooth. It was decided to extract the offending tooth. This was found to be impracticable and an injection of cocaine (ten per cent. solution) was then given. The patient found immediate relief, lasting a number of hours. Dr. Ramsden then continues as follows: "Next day, the pain being very severe, he sent to his chemist for a similar solution, and had three minims injected, but without the desired effect; he returned it to the chemist and asked him "to make it stronger," which he did, making it twenty per cent. He brought this to me, but omitted to tell me that the solution was double the strength of that which I had used. He told me that three minims had not given him the relief that he had experienced from mine; I therefore gave him four minims of what I believed to be a ten per cent. solution, and within five minutes he became restless and inclined to vomit; he then began to feel a sensation of pins and needles in the left arm, which rapidly extended to the right side. This was speedily followed by contraction and rigidity of the fingers, arms, and legs; there was also a tendency to opisthotonus. His pulse became extremely rapid and feeble, his face livid, and the muscles of his mouth and

¹American Journal of Dental Science, 1st series, Vol. iii, p. 8.

cheeks contracted. His respirations were short and convulsive: his feet and hands very shortly became cold, and a profuse perspiration broke out on his head and face. I first gave him half a tumbler of brandy, followed at short intervals by drachm doses of spiritus ammoniæ aromatici, and applied strong mustard over the cardiac region, and used friction to the upper and lower extremities; at the same time I let him inhale a few drops of chloroform to try and check the spasmodic contractions. After continuing these remedies for nearly an hour the pulse began to improve, the color return to the face, and the rigidity of the muscles lessened, but returned again immediately I stopped the friction. At the end of two hours he improved more rapidly, but felt somewhat drowsy, and it was not until about four or five hours that all the symptoms had subsided. On questioning him afterward regarding his sensations, he told me that although he was unable to speak coherently he knew all that was passing, and it was not until he felt the abdominal muscles becoming rigid that he felt anxious, for then he thought he was dying, and a sensation of suffocation came over him."—*Medical Record*.

THE ELECTRIC LAMP.

EXTRACT FROM A PAPER BY THOMAS ROWNEY, L. D. S. ENG.

The electric lamp, in its application to dental operations, is one of the most beautiful and useful contributions of modern science to the wants of the dental surgeon. It is the best substitute for that euphrasia for which he has so often longed, which should give an increased power to his vision when uncanny cavities, difficult of access, are presented for treatment.

May be, it is a second lower molar, standing high above its fellows, whose distal cervical surface is the seat of the decay, into the recesses of which a reflected ray of ordinary light can scarcely penetrate, even at mid-day with a bright sun shining overhead, much less on a cloudy winter's day. In such a case,

the electric light, from a well-constructed instrument, will reveal the deepest depth, and enable the operator who desires conscientiously to do his work, to do it with the minimum of discomfort to his patient, and with the least amount of fatigue to himself.

In operating on cavities in the buccal surfaces of molars, both upper and lower, particularly in the *dentes sapientiæ*, the lamp has an especial value, and we might enumerate many other cases in which it can be used with the greatest advantage. Some little practice may be necessary before the required dexterity in its management is attained, but the educated hand so readily responds to the educated will, that to him who tries and tries again all things are possible. We see just so much as we bring the ability to see, and bringing this new and additional power to aid us, we cannot fail to see more and see it better. * * *

The general reader who takes up a book on the electric lamp is met at the outset with terms whose names tell nothing of their meaning. Important as they are to a clear apprehension of the subject, they are so frequently hedged about with abstruse language that they are hard to be understood. Lamps differ in the amount of resistance they offer to the passage of the electric current. This is stated as being so many ohms. The resistance of our telegraph wires is about 13 ohms to the mile, and it is by means of these ohms that the position of a breakdown in a submarine cable can be located with certainty. It will be seen then, that an ohm must be a known measure, an equivalent to a known force, a measure of energy as opposed to a resistance.

No known substance is capable of allowing a current of electricity to pass without offering some resistance to its passage. Copper is the best known conductor. If we represent its resistance as = 1, then iron offers nearly $5\frac{1}{2}$ times the resistance of copper, platina nearly $6\frac{1}{2}$ times, mercury 50 times, and carbon 3,000 times, at the average temperature of the atmosphere; and while heat increases this resistance in all the metals, in carbon it decreases it.

A column of mercury nearly 42 ins. long and nearly $\frac{1}{25}$ th of an inch square section, would offer, as seen from the foregoing statement, a known resistance. This is the measure of the legal ohm as fixed by the Electrical Congress.

A lamp is stated as being so many volts with so many candles' power. The dental lamp is about $2\frac{1}{2}$ or 3 candles' power to 3 volts; that is, it requires 3 volts of electricity to develop its greatest lighting power. Now, each of these volts is produced by the consumption of about $18\frac{1}{2}$ grains of zinc per hour in a Daniel's battery. The volt then, may be taken as the unit of electromotive force. This, in a circuit whose total resistance is one ohm, produces a current of one ampère, and this ampère will deposit electrolytically nearly $20\frac{1}{2}$ grains of copper per hour. This ampère may be taken as the unit of current.

It is easily seen, then, that by weighing the zinc plates of a Daniel's or any other battery before and after an hour's action, the number of volts can be readily determined, and on these and the other data can be calculated the power necessary to develop any amount of light and also its cost.—*Dental Record*.

MORE SUCCESSFUL THAN PASTEUR.—In a paper in the August number of the *Revue Scientifique* the writer says that Docteur Jagell, a Polish physician, has been making a study of hydrophobia and its methods of prevention and cure since 1858. The doctor says that bites through the clothing are always innocuous, and that deaths among Pasteur's patients have occurred among those only who were bitten in unprotected parts. He believes that the virus which Pasteur uses, cultivated or transmitted through the rabbit, cannot possess sufficient virtue to prevent so malignant a malady. Docteur Jagell has treated eighty-eight cases of bites from rabid dogs and wolves with an infusion of *spirra fillipenda* and has cured every case. Twenty-six of these cases were in the first stages of hydrophobia when the treatment was commenced.—*Medical Times*.

EXTRACTS.

EXTRACTS FROM PROCEEDINGS OF OHIO STATE DENTAL SOCIETY, October, 1886.—Dr. Harroun: It is possible for an abscess to exist without death of the pulp, though it is rare.

Dr. G. W. Keely: The first case of replantation I ever saw, was many years ago; the tooth was extracted, cleaned, replanted, and remained healthy for thirty years.

My first case was one of replantation, a lower molar, it lasted fifteen years and finally dropped out; it was my best case.

Dr. Dorrance: A little point I mentioned last night was not "caught onto" as the phrase is. Instead of using a silk ligature to carry the rubber dam beyond the margin of the gum, use a little binding wire, pass it around the tooth, twist it tight, and you will thus be able to carry the rubber away beyond the cervical border under the free margin of the gum.

Dr. Siddall: Undoubtedly the first requisite is to see clearly what you are doing, and for men at my time of life, it is necessary to have proper glasses, nicely adjusted to the sight; my first pair of glasses came in the nature of a revelation to me, enabling me to see many little things that had long escaped me. The eye-glass, such as jewellers use, is also of valuable assistance to the operator.

Dr. J. Taft: Impacted teeth are found in all positions in the mouth, the third molar most frequently being out of proper place, sometimes causing serious consequences, baffling the skill of the surgeons as well as that of the dentist. The whole list of lesions from irritation to inflammation, suppuration, and finally abscess may not infrequently occur. Sometimes an abscess of the first or second molar will extend to the third, involving it also, for the reason that its condition is favorable to

it. All these cases demand careful examination and study. In looking over a collection of skulls, it is surprising to see the frequency of impaction of the third molar, occurring most often in the upper jaw.

Dr. Butler: A great deal has been said here concerning the good qualities of tin, and I am glad to see there is so much harmony on the subject. Regarding the use of textile foil by the profession, I asked Dr. Robinson whether the demand for it was increasing, and he told me that it conflicted too much with amalgam, in the hands of the dealers, to increase in use to any considerable extent. I opine the trouble is more with the operator than the material.

For myself, I have been using it ever since its introduction, up to the day I left home; it is one of the things you like better the more you use it, and I hope it will come into general favor. When thoroughly packed, it makes a mass nearly as solid as cohesive foil.

Dr. Talbot: I wish to call your attention to a method of regulating teeth by means of piano wire springs adjusted to a couple of small plates of vulcanite fitted against the teeth to be moved. The young lady here is a patient of Dr. Harroun's, and I made the plates upon a model he sent me so that it could be exhibited to you. The little plates each have a hole drilled into them, into which fits a nib at the end of the spring so that it can swing forwards or backwards to suit the convenience of the patient. Instead of the W spring, the wire is coiled upon itself two or three turns, in the middle, and then bent into the form of a V; the nib at each arm of the V fitting into the holes; the coil will be at the junction of the two arms. The plates are, of course, to be securely tied into place. Until four years ago, the lever, screw, wedge, inclined plane, and wheel and axle, were the mechanical forces used in regulating teeth. Piano wire in the form of springs of various shapes has since come into great favor, the curves and coils into which it is formed giving the necessary force; the pressure is constant, and one spring will answer for many cases. In spreading an arch, for instance, it requires some little study to deter-

mine where to drill the holes in the rubber plates I spoke of. If the holes are deep enough, the force of the spring will be sufficient to retain it in place, though the plates must be securely ligated to the teeth.—*Dental Register*.

DR. M'KELLOPS' METHOD OF MAKING GOLD CROWNS.—In reference to dressing the roots of teeth, that is not an easy matter. I fit the band while the patient is sitting in the chair. The work is done then and there. The first thing is to get the end of the root in such a shape that I can put a band over it. How do I do that? I cannot do it with a scraper, because I cannot get a scraper around it. Neither do I take an impression of the root. I use the filling dressers, the file that cuts toward me—not from me. You can have them made in any shape you want. After the root is in shape I take a piece of silver wire, such as surgeons use for ligatures, and twist it around the tooth to be crowned so that it fits there, then I take a piece of pine stick and whittle it into the shape of the root, until the silver wire fits it accurately. I then take a piece of pure gold, or one-half coin and one-half pure gold, roll that down to about 28 or 29, and fit it on the pine stick, and then fit the band on the root. I take no impressions. I use Patrick's machine to make the crown, then I take a crimping machine and crimp the edges of the crown. I know my band fits well because I can see it. I telescope that either inside or outside. I try it in the mouth after I have got my band to fit, and let the patient bite it and get the articulation. To remove it I take an excavator and slip it above the band, and go to work and dress it up and turn it over to the finisher and let him polish it. That is my manner of making a crown. It is as simple as I can get.—*Trans. Ill. Dent. Soc.*

A DEVICE FOR SENSITIVE TEETH AFTER BEING FILLED.—I have been called upon to make an explanation of a little device for use in cases of sensitiveness that occur after filling over a pulp that has been capped, or a pulp that has not been quite exposed, or a sensitiveness occasioned by running too

hot a disk in finishing the filling. Here is a tooth pulp that has become excitable by whatever cause, which is painful at every change of temperature. We all know what trouble such cases give. Every drink of water, even a cold breath of air, causes intense pain. For the purpose of relieving this, take a little gutta percha, soften it over a lamp or in warm water which is better, get it to the right consistency, allow it to cool as much as you can, so that you can still mold it readily, and with your fingers mold it over the tooth and the two adjoining, hold it there a short time, then remove it, press it together the least bit and pass it into coldwater and cool it: take it out, dry it, trim it in such a way that it will be of the least inconvenience to the patient, and slip it into its place. Then instruct the patient to take that out and slip it in as required, and wear it in all conditions in which there is liability to thermal change. If the tooth is very sensitive they will not, as a rule, have to be instructed the second time, for they find the relief. Treated in this way, the pulp can be saved in two-thirds of those cases where we would ordinarily have lost it. Once get in the habit of using it, and I am sure you will continue its use.—DR. BLACK, in *Trans. Ill. Dental Society*.

AMATEUR DENTISTRY.—The first operation I made in dentistry was in my own mouth when I was about thirteen years of age, and was a result of what we call an unfortunate accident, the falling down upon the ice and breaking of my upper central incisors. The pulps were left exposed. In the town where I was living there was a gentleman who was half physician and half dentist, being the only dentist of any kind in the neighborhood at that time. After twenty-four hours suffering I was induced to go to this gentleman and have these pulps, which were hanging down, removed by the operation of probing them out, as they called it. Not long after that, being in school and my teeth broken off, I conceived the idea of supplying their loss, more in a spirit of mischief than anything else; and during school-hours I set to work and carved out some wooden teeth and put them into the sockets formed by the pulp

canals. I purposely placed them in irregularly, one standing in and the other standing out, so that they would look more grotesque and ridiculous. That circumstance of losing my teeth and that crude effort to replace them were the direct cause of my becoming a dentist.—DR. G. A. MILLS, *in Cosmos*.

SALICYLIC ACID FOR TREATING ABSCESSSES.—In the treatment of abscesses I have found the crystals of salicylic acid a most excellent remedy to break up the sac and produce healthy granulation. But the great trouble is to get it to the sac. The alcoholic solution is too irritating, and it requires considerable time and patience to introduce sufficient quantity into the fistula to effect the desired result. I intend to have some slender gelatine capsules made to fill with salicylic acid or any desired remedy, that can be inserted into the fistula, and carried to the sac, thus enabling me to get the remedy where I want it, and keep it there until its effects are obtained.—DR. TOWNSEND *in Trans. Ill. Dental Society*.

WHERE GOOD DOCTORS ARE MADE.—Billroth says that three conditions are essential in the making of good doctors: 1st. The teachers must be good. 2nd. Facilities for teaching must be good. 3rd. There must be but few students. It is plainly evident that a class of from 300 to 600 in a medical college can receive instruction only in a general way, there cannot be that attention to the necessities of the individual student which those students desire to receive. Class teaching must be abolished except in private classes, for which instruction the students must pay additional fees paying for the same instruction which should have been included in the course for which they paid, at the time of matriculation.

It is quite a prevalent error with young men preparing to enter a medical college that they must enter that college which has the largest number of matriculants. It is the members of the smaller classes who invariably receive by far the most instruction and attention from the professors during the college course without additional fees.—*Medical Times*.

[The above applies equally well to Dental Colleges.—ED.]

EDUCATION.—Extracts from a paper by J. W. Foreman, D. D. S., read before the Virginia Dental Association, 1886. *Southern Dental Journal*.

I fear there is too great a tendency among us to consider our education finished when we leave the halls of the college with our diplomas in our hands—so, when we have a spare hour during the day, we are tempted to sit down and pass it smoking and chatting with a friend. When the evening comes we must go to the ball, german, opera—anywhere except to our books. It cannot be denied that this course will help a young man to get practice, but it does not help him to deserve it. If a merchant sells a friend a poor article as good, and charges him accordingly, we all would say he was dishonest. Yet, we will give our friends services we know are not as good as we ought to be able to give, and doubtless are thought to be giving, with never a qualm of conscience.

It is idle to expect to lift dentistry to a much higher plane with this dead weight of error and indolence. A man is morally bound to use at least moderate efforts to make himself as proficient as he is capable of—to deserve the confidence placed in him by those who are utterly at his mercy. Can he neglect these and be honorable?

CALL A HALT AND EXAMINE CRITICALLY.—Extracts from a paper by T. H. Parramore, D. D. S., read before the Virginia Dental Association, 1886. *Southern Dental Journal*.

Next came the "Dental Engine": Gentlemen, it would require a small fortune to purchase my engine if I could not get another. Yet the dental engine has, and I fear is still working a great deal of mischief; very many nerves are uncovered by its reckless or unskillful use. I fear, Mr. President, the demonstrators of our colleges are to a great extent responsible for the abuse of this most useful machine. As a remedy I would recommend that no student be allowed to use an engine until he has learned to handle an excavator intelligently.

Bridge-work is the perfection of "prosthetic dentistry." But just how far we can go in the use of bridge-work before we

cross the border-line of its abuse, is a very hard question to decide. I have always condemned the practice of fastening a whole set of upper teeth to four roots as is often done; the advocates of this method, however, claim great things for it, and those whom I have seen wearing teeth inserted by this method seemed charmed with them, but I prefer to wait until its claims are more fully established.

In partial cases, under favorable circumstances, bridge-work has no equal; it is perfectly comfortable, easily cleaned, natural in appearance and gives entire satisfaction to both the wearers and their friends. The same danger that besets pivoting is lurking near this beautiful, tempting work.

TO THE MEMBERS OF THE STANDING COMMITTEES.—We are a society of workers; our continuance as members depends on our efforts to promote the interest of the Society. According to our By-Laws, if we fail to do something in that direction at least once in two years, we forfeit our membership; now, Gentlemen, don't wait for your fellow-workers on the committee, but begin at once and do all you can. Individual work is the kind that produces the result we call success. You are not limited to the committee, work or subject. Write an essay or prepare a Clinic on any subject that suits you. Don't put off this work, but determine now, at the beginning of our society year, to do something for the advancement of the profession and the interest of our Society. Let us mutually resolve by our united efforts to make our Society equal to any in the United States, so that our printed transactions will be valued as a book of reference and instruction. To this end I ask you to labor; and hope to see you at all our meetings. Bring with you any and all intelligent dentists of your acquaintance, so that the Southern California Odontological Society will indeed be the united effort of the profession of Southern California, in advancing our noble and philanthropic science. Again asking your hearty co-operation for the good of humanity. I am your most obedient servant,

J. C. McCoy, President.

[The appeal is applicable to all members of dental societies, hence we insert it for their benefit.—ED.]

BRIEF MENTION.

IN READING the journals, if you discover errors, you should point them out for the benefit of your brethren. We hope our readers will consider the ARCHIVES a medium by which truth may be disseminated and the dark places made light, removing stumbling blocks from the paths of others. H.

THE HERBST METHOD will always bear that name in spite of the modest request of the author that it be known as the German method.

BRIDGE WORK is in its infancy, and the profession is divided regarding its practicability.

A CAREFUL review of exchanges shows what class of papers is most popular among the editors of dental journals.

Short papers containing original practical ideas are copied to a larger extent than any others; writers should take a hint, and those desiring a wide distribution of their best thoughts, should give them to the press in a compact and lucid form. Short articles are more apt to be perused than long prosy ones.

THE PROFESSION is without a perfect filling material, and is looking towards the cements for a fulfilment of this want.

WE formed the acquaintance of the genial Dr. Nelson, editor of the St. Louis *Courier*, while at St. Joe. J. H. Chambers & Co. have a faculty for selecting good men to edit their various journals.—*Medical Index*.

A BROOKLYN PHYSICIAN shot and killed himself on Christmas day, because others would not give him an opportunity to kill them, in other words, he committed suicide for want of patients. Prof. Kolumnine accidentally killed his patient and then committed suicide.

"Canst thou not minister to a mind diseased,
Pluck from the memory a rooted sorrow,
Raze out the written troubles from the brain?"

[The dentist can pluck from the jaw a rooted sorrow.]

THE TITLE OF DOCTOR was first invented in the twelfth century, at the first establishment of the universities. William Gordenia was the first person upon whom the title of M. D. was bestowed. He received it from the college of Asti, in 1329. —*N. Y. Med. Times.*

"I SUPPOSE you have had many prominent men for patients," said a gentleman to a dentist. Oh yes! and I have found that their tongues, in most cases, resemble their teeth." "In what respect?" "Because they have been stopped by gold."—*Ex.*

EXCHANGES will please us by giving credit to the author and journal from which they make extracts; these few lines were suggested by seeing in one of our exchanges nearly the half of an article, without anything to indicate that it was an extract.

BIND your journals.

FILLING teeth has been greatly simplified during the past few years. By the judicious use of cohesive and non-cohesive gold, hand pressure, hand mallet, Herbst method, mechanical mallet and matrices, filling teeth with gold has become a pleasure. H.

TRY WIRE ligatures, they are superior to thread. In case the wire will not pass readily between the teeth, make it in the form of a staple, and pass the legs of the staple through the space formed by the necks of the teeth. In case it is essential to carry the rubber dam well up on the neck of a tooth, it can be secured there by pressing the wire up or down, as the case may be, and it will retain its position and hold the dam just where you desire. H.

A DENTIST'S EXPERIENCE is exceedingly varied and beset with numberless difficulties, perplexities and trials. He may be ever so skilful in the dental art, and possess the requisites that

especially fit him for his calling, yet he cannot invariably overcome impending obstacles, nor count on uniform or absolute success. No man is infallible, however he may boast, for infallibility is not a human attainment. Failures occur in all quarters, and every mortal has a proportionate share of them. If individuals see not their own imperfections, perhaps others do, yet occasional ill success does not indicate absence of manipulative ability, nor a total lack of talent or genius.—*Dr. C. E. Francis.*

MANY DENTISTS, in consequence of not having had the idea firmly impressed upon them that without the proper education of the people, all labor is worthless, plod on for years, perhaps, without in a single instance standing before their patients as doctors—teachers. They have stood there perhaps faithfully as operators, as mechanics, and, perchance, even as scientific men; but, notwithstanding all, they have failed to make good their title as teachers. Hence, dentistry is not making as rapid a progress in the direction of education and prevention as it should. Almost perfection is attained in methods of repairing destruction and replacing loss of dental tissue, but there is not yet the full appreciation and understanding of preventing the necessity of such repairing and replacing.—*LOUIS OTTOFY.—Dental Review.*

QUEEN VICTORIA says of our specialty :—"Yours is the most useful profession, for while some require the services of the oculist, and a still smaller number those of the aurist, almost all, sooner or later, have need of those of the dentist."

FROM what we have heard and seen, the meeting of the Southern eclipsed that of the American. While this is not spoken in the spirit of bragadocio, it shows to us what is in our power to do when every man comes up to his duty.—*Ex.*

THERE can be nothing more disagreeable to a dentist than to have warts on his hands. To remove them, take sulphate of magnesia. Ten to twenty grains daily for a few days will usually suffice for an adult.—*Ex.*

HE SAW HE WAS FROM CHICAGO.—A well-known dentist contributes the following to the *Boston Record*:

A gentleman from the boundless West was calling at the "parlors" for consultation, and as the interview was about terminating, his eye chanced to fall upon the doctor's diploma, the leading line of which, in very black text, ran thus: "Academia Chirurgia, Dentium," etc., etc.

As the *Chirurgia* struck him, his face suddenly lighted up, and, extending his hand energetically, exclaimed: "Why, doctor, I didn't know that you were from Chicago. Shake!"

EFFECTS OF STUDY ON THE TEETH.—Among the hard-worked pupils of the Paris public schools the teeth become deteriorated in a few weeks after entry. The second dentition is often premature. These observations confirm the statements of Dr. J. L. Williams, who has given great attention to this subject. He has shown that any mental strain shows itself upon the teeth in a short time, both in increased decay as well as in increased sensibility of dentine. Dr. D. M. Parker has reported that these same changes are always apparent in men who are training for athletic trials.—*Boston Medical Journal*.

OUR British cousins are following in our footprints. At a recent meeting of the Odontological Society, a number of little "tricks" were shown. One of them was to place a cork between the teeth, to serve as a prop and a mouth mirror holder, the mirror is attached to the cork by a wire in such a manner as to be adjustable, leaving both hands free. H.

TRAUMATICIN is what the surgeons call liquid gutta-percha.

THE LARGEST NUGGET EVER FOUND.—The Grass Valley (Cal.) *Union* prints the following information: "Louis Blanding says the generally accepted statement that the largest nugget ever found in California was worth a little more than \$21,000 is an erroneous one. He says that J. J. Finney, 'Old Virginia,' found a piece of gold about six miles from Downieville, Sierra County, on August 21, 1867, that weighed 5,000 ounces. The gold of that vicinity was worth \$18 an ounce, which would

make the value of the nugget \$90,000. This would make the Finney nugget the largest piece of pure gold ever discovered, so far as accounts go. Heretofore the Australian nugget, found in the Ballarat gold fields, has been considered the largest. It was valued at \$60,000. Finney, or 'Old Virginia,' as he was familiarly called in those days, afterward went to Washoe when the great silver discoveries were made there, and from him the town of Virginia City took its name. The man who discovered the largest nugget in the California mines, and gave his name to the richest mining camp in the world, died in extreme poverty."

J. HARDMAN, D. D. S. of Muscatine Iowa, recently read before the Muscatine Academy of Science a paper on; "Is Life Force Matter"? Dr. H. is the society Chairman of the Committee on Biology; The paper, which has been printed, is a very interesting and suggestive one. We hope however, that Dr. H. will pursue this subject further, S

THE short, practical original articles in this number are just what we most desire. We hope that our readers will take them as samples by which they will prepare papers for future numbers. Don't say you have not time to give useful information to the profession. H.

T St. Louis Dental Society hereafter will give a gold medal annually to the graduate of the Missouri Dental College passing the best examination in all branches. The medal will be appropriately designed and known as the St. Louis Dental Society Prize.

CHANGE OF DATE.—The Southern Illinois Dental Society will convene at Duquoin on the second Tuesday (12th) of April instead of the first Tuesday, the former date. Members of the society especially, will note change; by order of president and executive committee. G. W. ENTSINGER, Sec.

A. WILKES SMITH, M. D., D. D. S., dean of the faculty of the Louisville College of Dentistry, commencing with February number of *Progress*, will edit a special department in this journal devoted to Dentistry. A specimen copy of the magazine containing this new departure will, during the year, be placed in the hands of every Dentist and Student of Dentistry in the South and West.

AFTER gaining the necessary space, if the teeth are sore, fill in between the teeth, solidly with gutta-percha for a day or two, until the soreness passes away.—*Dr. J. B. Monfort.*

IT IS WELL to hesitate before condemning operations that our neighbors have performed, for it is possible that no better results would have followed had like tasks, under similar circumstances, been attempted within our own doors. Before hurling offensive missiles at others, it may be wise to consider if the fortifications erected for our own shelter are not citadels of glass.—*Dr. C. E. Francis.*

A REMARKABLE case is reported by a physician of Worcester, Mass., of a young man who had had three-fourths of an inch of a finger cut off by a large paper cutter, and came to the doctor with the piece in his hand. The doctor adjusted it to the place from which it had been cut and in ten days it became firmly adherent.—*Ex.*

A VASSAR graduate out in the country went into the stable of a farm house. "Dear me, how close the poor cows are crowded together," she remarked. "Yes, ma'am, but we have to do it." "Why so?" "To get condensed milk."—*Analyst.*

WITH THE support of the government in Germany a very recent and most remarkable advance has been made in the power of the microscope. It consists in an improved lens, composed of a newly discovered quality of glass of great hardness, permanency, and freedom from color, and cut according to a new system of curvatures. At a late meeting of the Royal Society it was asserted that the general power of microscopes would be increased thirty per cent, consisting

chiefly in greater achromatism of the objective. CHARLES A. SIEGFRIED, Surgeon United States Navy—*Medical Review*.

TO INSPIRE CONFIDENCE.—A dentist in Mexico had a patient who was timid about having a tooth extracted. To show him that the operation amounted to nothing, the dentist called the boy who wielded the mallet and, telling him to open his mouth a minute, pulled out one of his teeth. The patient was not reassured, and the dentist lost his small boy. *Medical Review*.

CLEAR SHELLAC VARNISH.--To get an absolutely clear solution of shellac has long been a desideratum, not only with microscopists, but with all others who have occasional need of the medium for cements, etc. It may be prepared by first making an alcoholic solution of shellac in the usual way; a little benzole is then added, and the mixture well shaken. In the course of from twenty-four to forty-eight hours the fluid will have separated into two distinct layers, an upper alcoholic stratum, perfectly clear, and of a dark red color, while under it is a turbid mixture containing the impurities. The clear solution may be decanted or drawn off with a pipette.—*National Druggist*.

ON ANOTHER occasion Paganini's false teeth nearly frightened a theatrical manager out of his wits. The violinist called in response to a note relative to an engagement, and a dispute took place as to terms. Enraged at an offer of one-fifth the net receipts, Paganini, forgetting that he had parted company with his own teeth, crunched his false ones so violently that they broke into pieces and cut his gums so deeply that blood spurted from his mouth. The manager concluded that his low offer had induced an apoplectic fit or caused the rupture of a blood vessel.

CAN DIPHTHERIA BE COMMUNICATED BY TOOTH-FORCEPS?—Dr. J. W. Collins, of Toronto, Ont., writes: During the month of January, 1887, there appeared in Toronto a man calling himself the 'king of dentists'. He held free clinics for the ex-

traction of teeth every evening for one week. At these 'extracting bees' he would call upon all who had aching or decayed teeth do come forward and receive gratis the benefit of his wonderful skill, and it is needless to add that he had plenty of work. During the latter part of the week I saw seven cases of diphtheria; all developed within two days. In each case one or more teeth had been extracted by this itinerant dentist. No other cases of the disease had been known in the community, either in my practice or in that of any of my professional brethren. Is it not probable that the disease was communicated by the instruments?—*Med. Rec.*

A SOLDERING FLUID composed of a tea-spoonful of chloride of zinc dissolved in two ounces of alcohol will not rust and tarnish, and has no bad odor.

EXTRACTS ON DENTAL HYGIENE. FROM SOUTHEY'S COMMON PLACE BOOK.—During the reign of Charles the First (1625-49) the Duchess of New Castle said; "Teeth that are dirty and foul may be rubbed with china and brick and the like."—*Annual Parliament, Poems and Fancies.*

Here is another dentrifice of beaten china, used during the reign of Queen Anne (1702-14). From Mr. Grey's diary, Surtees Durham, "Went into Yorkshire in a stage coach. I eat some raisins which in my pocket happen to mix with a dentrifice made of beaten china, which threw me into so violent vomiting and purging that I had like to have died on the road.

AN EXTRACT from Hall. Misc. During the reign of Charles the Second (1660-84;) There is also a great want of that neatness and gentility which is practiced in Italy, for on English tables there are no forks; nor vessels to supply water for the hands, which are washed in a basin full of water, that serves for all the company; or perhaps at the conclusion of a dinner, they dip the end of the napkin into the beaker, which is set before each guest filled with water, and with this they clean their teeth and wash their hands." * * * "Inquire at ordinaries; there must be salads for the Italian; pick-tooths for the Spaniards; pots for the Germans; porridge for the Englishman."—*Old Play*

ASK AND YE SHALL RECEIVE.

1. Is a piece of "Bridge-Work" such as are being placed in the mouths of patients to-day, conducive to health? L

2. Will you please be kind enough to tell me if the potash-alum spoken of on page 30 of the ARCHIVES OF DENTISTRY Jan. number, 1887, is the common alum, or is it the C. P. alum, or what is it? BLAND.

[It is the alum used in medicine, and the only kind kept by druggists. H.

3. I have a patient who has a dead tooth, central incisor, and the root has been filled for the last three years, but the tooth has become discolored, as is usual in such cases, and she is very anxious for me to restore the color. Therefore I ask your advice in the matter, and would be very thankful indeed for some light on the matter.

BOOK NOTICES.

THE AMERICAN SYSTEM OF DENTISTRY. In treatises by various authors. Edited by WILBUR F. LITCH, M. D., D. D. S., Professor of Prosthetic Dentistry, Therapeutics and Materia Medica in the Pennsylvania College of Dental Surgery, Philadelphia, Volume II. Operative and Prosthetic Dentistry. With one thousand and thirty-five illustrations, and three plates. Philadelphia: Lea Bros. & Co., 1887. (For sale by J. H. Chambers, 914 Locust St., St. Louis, Mo.

This volume comprises a series of monographs, twenty-six in number, prepared by prominent writers and specialists, embracing a full list of subjects included in the departments of operative and prosthetic dentistry. We shall review this and the preceding volume in a subsequent issue.

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LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of preventive medicine—individual prophylaxis,

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MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various Antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. Miller, A. B., Ph. D., D. D. S., Prof. of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

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To the Dental Profession.

GENTLEMEN:

After having practiced Dentistry for fourteen years I determined in 1866 to make a Specialty of Dentifrices, with a view of producing an article which should not only be acceptable to the general public, but also be approved and indorsed by the Dental Profession.

In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

They will be found in all the leading stores where such goods are sold, and where Dentists can recommend their patients to call for them. This obviates the necessity of Dentists keeping such preparations, which has proved by experience to be generally unprofitable. I should be pleased to forward a sample of my TABLETS or POWDER to any Dentist, free of expense, on receipt of a postal card giving address, that all may have an opportunity to test its merits. I am,

Respectfully yours,

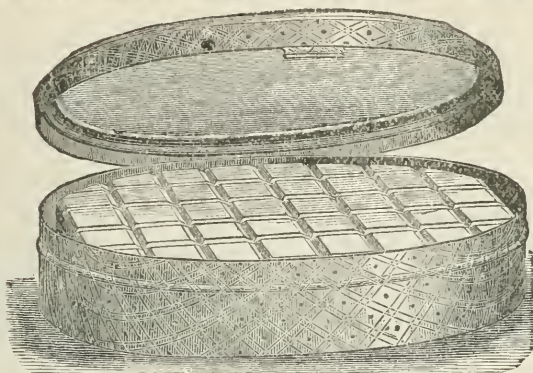
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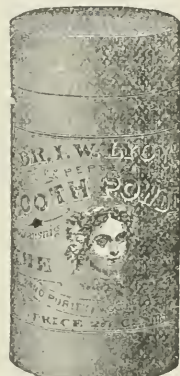
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ANNOUNCEMENT OF THE SPRING COURSE

—OF THE—

CHICAGO COLLEGE OF DENTAL SURGERY.

CHICAGO, February, 1887.

This course will begin Monday, April 5th, and terminate the 22nd of the following June.

This course of instruction will be chiefly of practical nature. There will be two lectures delivered daily—a portion of each hour being occupied in quizzing and recitations—beginning at 8 A. M., thereby enabling the student to occupy the remaining hours in actual practical work in the physiological and chemical laboratories and in clinic rooms, treating and filling teeth, constructing artificial dentines, etc.

The following well-known and competent gentlemen will compose the Spring Faculty :

- | | |
|--|---|
| J. E. Jenkins, D.D.S., Lecturer on Chemistry. | J. G. Reid, D.D.S., Lecturer on Materia Medica. |
| J. W. Wassall, M.D., D.D.S., Lecturer on Anatomy. | J. D. Moody, D.D.S., Lecturer on Pathology. |
| Garret Newkirk, M.D., Lecturer on Dental Irregularities and Hygiene. | W. B. Ames, D.D.S., " on Prothetic Dentistry. |
| L. L. Davis, D.D.S., Lecturer on Histology and Microscopy. | Louis Ottoby, D.D.S., " on Physiology. |
| C. N. Johnson, L.D.S., D.D.S., Lecturer on Operative Dentistry. | Edwin C. Timerman, D.D.S., Lecturer on Therapeutics. |
| | Godfrey S. Salomon, D.D.S., Lecturer on Clinical Dentistry. |

DEMONSTRATORS.

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| W. A. Jones, D.D.S., Operative Dentistry. | J. E. Hinkins, D.D.S., Chemistry. |
| W. G. Stowell, D.D.S., Operative Dentistry. | L. L. Davis, D.D.S., Microscopy. |
| H. P. Smith, Prothetic Dentistry. | |

The Spring Course is preliminary to the regular winter course; it is, indeed, the *beginning of the college year*; it assumes that one entering the class is without any knowledge of dentistry, and yet it is prepared to meet the wants of students far advanced in their studies. It is intended to take the place of office instruction, and students without dental knowledge, as well as those more advanced, who wish to avail themselves of the great advantages offered for practical work and instruction are earnestly advised to enter the spring term.

During the last week of each spring term, the student will be examined, and will receive certificates of attendance and grade of examination. This course cannot be considered as equivalent to a "course of lectures" in the requirements for graduation.

THE COLLEGE

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FEES FOR THE ANNUAL SPRING COURSE.

Matriculation Fee (good till the following April)	\$ 5.00
Lecture Tickets	20.00

This amount will be deducted from the fees of the next following winter session.

Graduates of the college are admitted on payment of the Matriculation fee only. Graduates of other regular dental colleges on payment of Matriculation Fee and ten dollars. (\$10.00). Fees for practical chemistry, \$5.00.

Instruments and appliances for clinical departments will cost from \$25 to \$40.

Board, including light and fuel, can be obtained at a convenient distance from the college, at from \$4 to \$6 per week.

Letters of inquiry should be addressed to the Dean,

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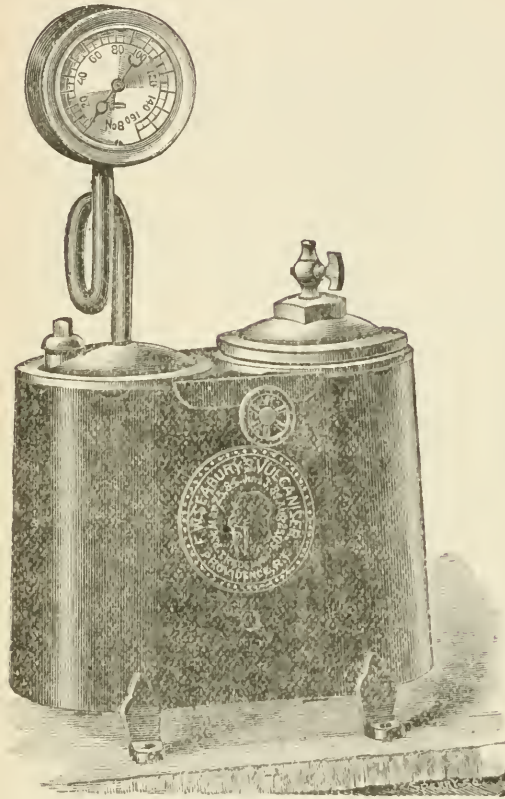
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Saving in time—the plates are vulcanized and finished in less than half the time now consumed.

During the process of vulcanizing, cases may be removed from the oven and others inserted, with a delay not to exceed five minutes.

The flasks are in a dry, clean oven, the plaster not being immersed in water, remains intact. The plates are thereby prevented from warping and therefore fit perfectly. The essential thing when vulcanizing is to have instantly, and retain, a pressure equivalent to the temperature. To insure this, a steam gauge is provided.

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TO THE PROFESSION.

DEAR DOCTOR:

As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondents, as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

The ARCHIVES is not in the least degree controlled by any association or dental supply house, but is independent and published in the interest of the entire profession. The price is reduced from \$3.00 to \$2.00 per year. Those of our present subscribers who have already remitted \$3.00 for this year will have \$1.00 credited on next year's subscription without any other direct. To those that have discontinued or are not now subscribers, we solicit them to sign blank below and mail to us early.

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Also two large pages of FORMULAS, as follows: *Bobbitt Metal; Adhesive Wax, three different kinds; Composition for making Gold Solder; Cadmium Gold Solder*, with rule for Alloy necessary to give requisite fineness of Gold Plate; *Oxy-Phosphate Liquid, Liquid Flux, Soft Solder, Comparison of Thermometric Scales; Artificial Respiration, Sylvester's Method, Marshall Hall's Method; The Decimal or Metric System of Weights and Measures, The Meter, The Liter, The Gram; Care of Galvanic Batteries, To Amalgamate the Zincs, and Battery Fluid.*

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Archives of Dentistry.

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APRIL, 1887.

[NEW SERIES.

ORIGINAL ARTICLES.

"Of all the arts in which the wise excel,
Nature's chief masterpiece is writing well"

ELEMENTS OF SUCCESS.

BY C. S. STOCKTON, D.D.S., NEWARK, N. J.

An Address Delivered before the Alumni of Boston Dental College, March 9, 1887.

MR. PRESIDENT AND GENTLEMEN—I thought, perhaps I should address to-night many who have just completed the curriculum of the college course, and that some general principles concerning your whole life, would be quite as acceptable as a talk upon one particular topic. You can, therefore, read between the lines all about proper deportment, dress and address, clean hands and finger-nails, napkins, instruments, etc., as I shall not refer to these which are usually dwelt upon in all discussions of success and failure.

The topic of my paper is "Failures," or, if you wish, you can denominate it "Elements of Success."

The world is full of contrasts, night and day, life and death, and joy treading on the heels of pain. While the day with

resplendent sun, the song of birds and the sigh of fair fields, is inspiringly beautiful, yet, were it not for the night, we should know nothing of the mysterious grandeur and the glory of the stars. While men gloat over their successes and revel in recollections of the days of prosperity, the true philosopher will extract as much wisdom from the gloom of failure; indeed his deductions may be hopeful and inspiring. The old Hebrew proverbist sententiously remarks that it is not good for a man to eat too much honey, and possibly we may learn wisdom by some reflections upon the nature, cause and avoidance of failures.

Failure, in the first place, is a word of relative significance, depending largely upon individual circumstances. One man's ideal may be exceedingly low, so that he attains it with no excessive effort. It is success to him, but to one whose conceptions of his fond achievement are immeasurably higher, such attainment would be disappointing and chagrining; and of such character are most of the successes in the world—not the lofty conquering of a noble difficulty, but an easy, cheap, brilliant performance which the world lustily applauds. The most classical and intricate music, taxing most severely the skill of the player, in most circles goes unrewarded, while the easy but fancy and startling pieces of short popularity tickle the general ear.

Especially in this era we seem to be too ambitious of success in its vulgar forms and too little careful of working out patiently the details of life. We accept easily the standards which a false condition of society raises, and glamored with the pomposity of wealth, call those successful who, like Fisk and Gould, win through cunning and unscrupulousness. John Morrissey goes down to his grave applauded by the secular press, having had his share of the good things of life, while Milton was prosecuted, imprisoned and paid some paltry sum for the grandest production of his life. The universe is so constructed that no fortuitous circumstance can ever cheat the true laborer of his just wage at the day's end. Therefore let men consider that there is no difficulty in the way of duty or

proper endeavor unsurmountable, no mistake irremediable, no sorrow unbearable, no failure irreversible. "Out from our stony griefs, Bethel we raise."

But, despite these reflections, since failure is on all sides the most common phenomenon, let us study the apparent causes. The first I mention is consequent upon devotion to a wrong cause. Napoleon may bring all the power of his genius to the establishment of an absolute despotism founded on blood; but the order of things in nature and the mind of men were against him and defeated him. A good conscience in a man is of first necessity to strong effort. If his attention is constantly called off by the accusing voice of an inward monitor, he can never address himself bravely to his best work. But when a man's cause is right, when his courage is stayed by the thought of uplifting humanity, he strives with a warm soul, kindled eye, sacred purpose and undivided attention. "The stars fight in their courses for Sisera."

Akin to this is the wrong choice of a life vocation. A man's employment may be sufficiently moral, but if there be not an adaptability between him and his work, he is foredoomed to mediocrity or absolute failure. Square men were never designed for round holes. To every man there is a place and for every place there is a man. Generally, if a man will study his inclination and the indications of circumstance, he will find his right arena; but ambition and false advice are perpetually acting as disturbing elements in this natural order. It is against the constitution of things for the born mathematician to be a poet, for the profound philosopher to be a book-keeper, for the wild trapper to be a student. If a man does not love his employment, though riches may heap themselves, for his own pleasure he might as well be a galley slave.

Again, men go out into life with insufficient preparation; rushing into the battle without the defensive armor or the belligerent weapons. A naval cadet, in his examinations, described very accurately the voyage asked of him, the course, oceans, gulf stream, capes rounded, etc., but his examiner, when he concluded, gravely remarked: "All very well, but

you neglected to weigh anchor at New York when you started." So hundreds of men are trying to make life's voyage, and though they have clear notions of how they ought to act, they are dragging about with them the anchor of ignorance or superficial knowledge which, in the start, has never been lifted.

Probably no ingredient of failure is more important than lack of labor. Goethe said he knew no genius but hard work; but many men trust to spasmodic efforts of a brilliant talent to accomplish their great plans. Æsop never told a truer fable than that of the tortoise and the hare. Prof. Henry, recently deceased, owed his great scientific reputation, not to any marked prominence of any faculty, but to steady, patient, long-continued application. It is only the despairing misanthropic view of life which asks: "What profit hath a man of all his labor which he taketh under the sun?" It is only monotonous to the worn-out profligate. In the theatre of man's life it is only reserved for God and the angels to be lookers on, and none are so miserable as those who have nothing to do. The busiest are the happiest. Work is the salt of life. "Employment so certainly produces cheerfulness," says Bishop Hall, "that I have known a man come home from a funeral in high spirits because he had the management of it." One of our Presidents was asked what would be his coat of arms? "A pair of shirt sleeves" was the reply. The napkin in which the slothful servant wrapped up his talent was the sweat-cloth with which he ought, in his toil, to have been wiping the beads of perspiration from his brow.

Many another man fails because of too aristocratic conceptions of his own dignity and the snobbish notion of the meniality of work. That merchant never succeeded who was not content at some time, or in an emergency, to do the drudgery; a dainty, lily-white-fingered dilettanteism, looking with holy abhorrence upon soiled hands or clothing, may indeed live a sort of effeminate emasculated, wax-doll existence, but as for noble doing or succeeding in the strife of life, where Greek meets Greek, they are miserable nonentities. Their leisured

ease is contemptible beside the horny hands of the hod-carrier.

Sad indeed are the biographies and unwritten records of those who fail, yet undoubtedly there are undiscovered elements of failure in such men's natures. Especially in our land, where the prizes are not to a landed or to a blue-blooded nobility but to the ambitious and laborious, should the cry of overbearing circumstances, the cruelty and irony of fate, be less attended to. In the history of the successful, patience has been an indispensable condition. Said the old prophet: "It is good for a man that he should both hope and quietly wait. It is good for a man that he bear the yoke in his youth." We gain not heaven or any other noble object by a single bound. It is the man who, in the beginning of his career, can intelligently lay out his life-work, set himself to a task which shall require twenty or thirty of his best years and devotedly persevere in it, who wins; who can endure all discouragements and adverse criticisms and keep the end steadily in view. Dr. Donne says that Lot's wife looked back and God never gave her leave to look forward again. God hath set our eyes in our foreheads to look forward, not backward; not to be proud of that which we have done but diligent in that which we are to do.

Lack of system has been the secret of many an unsuccessful career. Such men had talent, genius even, but not that principle of order which has a duty for every hour and moment. Their time was wasted; their efforts, without harmony and coherence, were desultory and dissipated. The man with moderate ability, who plans and economizes his time and gets the whole worth of his existence, is the victor; he lays out a campaign not only for all summer but for his whole life; he considers every night what duties the morrow will bring and apportions to every work its due season.

For any man, especially for a professional one, the closest, severest study is requisite to success. It was the motto of a celebrated chemist to examine all the contents of phials which others threw away. Only by the most continuous reading can the professional man keep abreast with the thought and discovery of his chosen calling.

For a beginner it requires some fourteen years to completely master the present status of chemistry, so that he may proceed to original investigations. If you add to the store of knowledge in your profession you must thoroughly know what has been done in the past ; otherwise your experiments will be attempting what is already known or what has been proven useless or impracticable. Thus your whole ingenuity will be spent in chasing butterflies. If you thoroughly know the paramount needs of your work, you may address yourself intelligently to their solution. In one sense all knowledge in the world is so interconnected that, if you strike in anywhere, you are involved in the whole. The tiniest flower pre-supposes an architect. The sun, atmosphere, dew, chemicals in soil, etc. If a man could tell all about it he would be wiser than Solomon.

“Flower in the crannied wall,
I pluck you out of the crannies ;
I hold you here, root and all, in my hand
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is.”

Failure has frequently to be laid at the door of excessive egotism—an overweening confidence in the powers which all know the person to be deficient in. Such persons value their own unproven deductions so highly as to spurn all experience, all proffered advice. Despite the testimony of geologists that oil bearing rock was not in certain strata at certain places, there they bored hundreds of feet in a wild endeavor to prove science a liar. A young minister, somewhat distinguished for self-conceit, having failed disastrously before a crowded audience, was thus addressed by an aged brother : “If you had gone into the pulpit feeling as you do now on coming out, you would have felt on coming out of the pulpit as you did when you went into it.”

It is the part of prudence, while treasuring loftiest ambitions to be conservative, and not pull so hard as to break the rope. No king going to war against another goes without first reck-

oning the comparative forces, was the illustration of a great teacher. Yet, withal, we must have faith in ourselves. It is the result of culture, of an education which really educes to our view what is in us, to furnish us with a complete and correct knowledge of our powers ; so that any given time, we can tell exactly how much we can do, can have a just measurement of our abilities. Thus a man will not be forever working beneath his privileges, nor will he be attempting the impossible and engaging in all sorts of chimerical undertakings which are beyond his depth.

Fortunate is he who knows just of how many horse power his mental and physical engine is ; who can calculate upon so much good work in a given time ; who neither puffs himself up nor depreciates himself, but wisely studies his economy of forces.

Another ingredient of failure is found in the loss of youthful ardor. It is as beautiful a sight as it is rare to see the fierce enthusiasm of youth "throbbing with the large excitement," in unison with the carefulness and experience of white hairs. Young men come burning into the field of action ready to evangelize and convert the world in six months, until they learn that the world obstinately refuses to be converted in any such time ; aching to bring advice and succor to their fellow men, until they find that their brother sufferers refuse the proffer with contempt. So they settle down to a comfortable idea of taking the world as they find it—a hard, stubborn, unpoetical fact, to be accepted without palliation with all its misery. They read Carlyle, grow cynical, and sneer at any genuine hearty effort at reforming humanity as the most moonshiny sentimentalism. Thoreau, I think it was, who said, "Youth gets together timber wherewith to build a staircase to the stars and in middle age concludes to make a wood-shed with it." Yet this shipwreck of warm devotion is most unfortunate and paralyzing to all philanthropy.

Men go into the world expecting its recognition of their talents, its cordial support of all their magnanimous schemes, and when this is churlishly denied they lose self-confidence,

sit down, "stick finger in the eye and cry." They have no ability to endure criticism but like Kirke White, sink under an unfavorable review. But with what derision have most new inventions been hailed; what sad reading are the biographies of discoverers as they toiled for successful accomplishment through natural discouragements and unnatural misrepresentation. O! for the manliness of one who cried, "Quit ye like men;" for the spirit of one, even, like Lady Macbeth who, when failure was suggested, cried, "We fail!" The human will has an almost miraculous energy when zealously directed to a definite end. This fixed, invincible purpose, according to Sir Thomas Buxton, is the real ground of difference between men as to great or insignificant. "I will be Marshall of France," once exclaimed a French officer; and he was. An English carpenter was laughed at for saying when asked why he took so much pains in elaborating a judge's bench, "I'm going to occupy it sometime." He did sit there in the robes of office. When told that the Alps made it impossible to take the artillery, Napoleon answered: "There shall be no Alps! Impossible is only found in the dictionary of fools." Garrison by the naked energy of a red-hot purpose made his "*Liberator*" a mighty power in moulding American sentiment on the subject of slavery. Opposition only intensified his zeal. "I am in earnest," he cried, "I will not retreat an inch; I will be heard."

Others fall below the mark because of lack of the quality of decision when the time has come to act. Like Hamlet they love meditation better than effort; they devise their plans ingeniously and elaborate them with painful minuteness, but never come to actual endeavor. All their efforts are sicklied o'er with the pale cast of thought and so lose the name of action. Leigh Hunt, who left only a few completed poems, left a large number in skeleton shape, or half filled out. A man must know just when the iron is hot enough, and then have the grace to strike.

Others still, differing slightly from these, fail from not knowing the day of their visitation, from not recognizing the

tide in the affairs of men which might have, if taken at the flood, borne them to fortune. When photography was introduced, it ruined many miniature painters, but the wise readily accepted the new order without complaint and laid down the easel for the camera. Oil merchants succumbed before the introduction of gas, but the far seeing became gas fitters. It was not wholly to accident that the lucky buyers of Boston back bay land became rich. So all around men these opportunities are passing and only the shrewd and awake avail themselves of them.

Scorn of the civilities of life, these courtesies and deferences which in right proportion dignify the true gentlemen, has been the key of many a man's calamity. These are styled the minor morals, but in practice, especially in professional life, destiny may hang upon politeness.

A surrender of a high ideal has worked ruin. Men commence life with a lofty professional enthusiasm to spend and be spent in their beloved service, but soon sink into an easy conventionalism which is satisfied with mediocrity if it secures a competence.

Again to avoid failure, one must be willing to practice much self-denial. The books necessary to successful professional life can only be had in the majority of cases by enforcing rigid economy. Agassiz, when a young man, visited one of the greatest naturalists of Germany, who, after showing him his costly instruments and magnificent library, invited him to dine with the remark: "To obtain all these which you see, I am obliged to practice the severest frugality. On three days of the week we have meat, on the other days we eat potatoes with salt; I regret that your visit has occurred on the potato d—ay." And so he sat down with his students to such a bill of fare. This is the high and successful philosophy of life which subordinates stomach to brain.

But the more practical question awaits us. How may we turn failure into success? The progress of the world has been through a series of blunders; out of difficulties grow miracles. Misfortune crushes the weak but nerves the strong to greater

effort. Uninterrupted victory is enervating, as has been proved in the history of Macedonian and Roman arms. Some failures are virtual victories in the morale of their effect, as with the battle of Bunker Hill. Said the British General: "Another such victory would be worse than a defeat." So with the men who fail after struggle; they do not altogether fail but are on their feet again in an instant. To the wise man failure, instead of overwhelming him, only teaches him more carefulness in constructing his plans and conducting his experiments. Indeed some patent element, in the failure, indicates clearly the right road to success. The chemist detects clearly the ingredient which balked him, and makes some grand discovery through his very blunders. The old alchemists stumbled upon some of the prime truths of chemistry. Our outermost planet was discovered through a failure to make a precise mathematical orbit of the path of the next inner planet. The failure to find perpetual motion was indeed a success resulting in the demonstration of its impossibility. The man who is never disturbed but with settled equanimity pursues his plans, succeeds.

The Roman general was determined to "find a way or make it."

Cyrus Field tried over and over again before he succeeded in laying the the cable. Then the sarcasm of two continents was changed into applause.

Whittier writes :

"Well, to suffer is sublime !
Pass the watchword down the line,
Pass the countersign "Endure;"
Not to him that rashly dares,
But to him that nobly bears,
Is the victor's garland sure."

Determination to get well has much to do with recovered invalidism. Firm will to defeat bankruptcy decides financial deliverance. Never surrender to misfortune or discouragement. You can, if you are spry enough, make it as uncomfortable for the whale, as the whale can make it uncomfortable for you.

There will be some place where you can brace your feet against his ribs and some large upper tooth around which you may take hold, and he will be as glad to get rid of you for a tenant as you will be glad to get rid of him for a landlord. There is a way out if you are determined to find it.

Away with the croakers who are always prognosticating failure—crying, "All's lost," before a gun has been fired. Come more of the Sheridans who ride impetuously from Winchester twenty miles away to turn the tide of battle and change signal disaster to glorious victory! John Brown's execution was remembered in the war of the rebellion, and his resurrected soul went "marching along."

"Truth crushed to earth shall rise again. The eternal years of God are hers." He who anticipates disaster suffers from it twice over. Cowards die many times before they taste of death; the brave man dies but once. Let us never lose heart.

"High hopes go down like stars sublime,
Amid the heavens of freedom;
And brave hearts perish in the time,
We bitterhest need 'em.

But never sit we down and say
There's nothing left but sorrow.
We walk the wilderness to-day;
The promised land to-morrow."

But most of all, measure success or failure by the good you do to humanity. You may not in your profession become a great authority, leading and perpetually suggesting, but as one of the rank and file you will have the satisfaction of knowing that you have done something to elevate humanity. Contrast a high philanthropic life with one devoted to mean, sordid ends. There is joy in the giving of comfort and felicity in the retrospect, and enviable is he who goes down to his grave loaded with the respect of his fellow practitioners and bewailed by the friendless.

"Why thus longing, thus forever sighing
For the far-off, unattained and dim ;
While the beautiful all around thee lying
Offers up its low perpetual hymn ?

Would'st thou listen to its gentle teaching
All thy restless yearning it would still,
Leaf and flower, and laden bee are preaching
Thine own sphere though humble first to fill.

Poor indeed thou must be if around thee
Thou no ray of light and joy canst throw,
If no silken cord of love hath bound thee
To some little world through weal or woe.

Not by deeds that win the crowd's applauses
Not by work, that give thee world-renown;
Nor by the martyrdom or vaunted crosses,
Canst thou win and wear the immortal crown.

Daily struggling, though unloved and lonely,
Every day by rich reward will give;
Thou wilt find by hearty striving only
Truly loving thou canst truly live."

SOME POINTS CONCERNING GUTTA-PERCHA.

BY C. W. STRANG, D.D.S., BRIDGEPORT, CT.

The value of gutta-percha as a filling material is universally recognized, and it has long been rated as not least important among other materials or substances used by the dental operator for preserving teeth. It is, however, with no little annoyance that we are compelled annually in some instances, and at the end of two or three years in the majority of cases, either to repair or to renew entirely former operations which have become defective mainly by the decomposition of the material used.

Notably is this the case in small cavities between molars and bicuspid and shallow cavities at the margin of the gums on the buccal surfaces of the second and third molars.

For a number of years we have substituted for the white stopping furnished by dealers in dental supplies the ordinary red base plate gutta-percha, and with the most satisfactory results.

Its use in the front teeth is not admissible except in those cavities not noticeable from the exterior.

Most dentists who have been long in practice can point with pride to gutta-percha fillings that have done duty for eight or ten years and occasionally for a longer period, but these are like "angels' visits."

The red gutta-percha does not appreciably deteriorate in those months where most of the white stoppings that I have been able to procure are rapidly acted upon by the secretions.

Fifteen years ago we treated and filled an inferior second molar for a patient. Preferring not to insert a permanent filling at that time, and our supply of "Hill's stopping" having been exhausted, we went to the laboratory in our extremity and got a piece of the red gutta-percha, with which we filled a large buccal cavity remarking, when the operation was completed that it was only a temporary filling. That tooth and filling are still doing duty and I am occasionally reminded that temporary fillings are satisfactory to him. For cavities in the masticating surfaces of the wisdom teeth it answers admirably. To obtain the best results, with gutta-percha as with all other filling materials, absolute dryness of the cavity must be secured. After adjusting the rubber dam, wipe out the cavity with warm alcohol. This seems to act as an obtundent, then proceed to excavate, and by the time the cavity is ready for filling absolute dryness will have been accomplished. Varnish the cavity with a solution of chloroform and gutta-percha and fill with small pointed instruments.

Any surplus can best be removed and the fillings more smoothly finished by wiping them with a pellet of cotton or paper dipped in chloroform. By this method there will be no drawing away from the walls of the cavity as is sometimes the case when the removal is attempted with a heated instrument.

To beginners we would say never use gutta-percha under fillings of other material. If a non-conductor is required, use something else.

In the mouth it invariably expands and with sufficient force to dislodge entirely or to sufficiently displace whatever per-

manent filling may be introduced, so that failure is sure to follow.

While we use it to fill the nerve canals of all the teeth we treat, we are scrupulously careful not to pack any in the body of the pulp cavity of molars, for we have again and again seen fine operations brought to grief in a few months from no other cause than the expansion of the gutta-percha which had been liberally used in order to protect from thermal changes.

DENTAL ISHMAELITES.

BY T. A. WILLIAMSON, D. D. S., FORT SCOTT, KANSAS.

May not a few words in advocacy of more cordial and gentlemanly relations between members of our profession, and in condemnation of their unseemly wrangles, especially in the smaller cities and towns, be of equal value to the fraternity (?) with a dissertation upon some technicality of the profession?

It is pitiable to witness the self-assertion and personal and professional detraction exhibited in so many localities, and it seems almost beyond comprehension that the participants in these contemptible squabbles do not see that they are injuring their own interests and degrading their profession. The practical effects of the spirit alluded to I have seen illustrated in some places I now have in mind. For an illustration, a town in which three dentists were located had a sufficient amount of dental work done, if remunerative prices were paid, to comfortably support the three. But unfortunately each one of the three felt himself, or affected to feel, that in his own important person was embodied all the knowledge and skill that was worth knowing in dentistry, and that each of his professional neighbors was devoid of any merit whatever. Each one of the precious trio engaged heartily in detraction of the other two, and showing how every piece of work from their hands was of no value or a positive detriment to the one possessing it, and to emphasize their absurdities they offered to do similar work

much cheaper. This course led to several very natural results. Where a patient had dental work thus maligned that proved entirely serviceable and satisfactory—as happens in perhaps a majority of cases with only an average dentist—he set down the said detractor at once as a liar and a quack.

Prices were cut down to such a figure that however hard each one worked, neither of them had any visible profits, and the public were so instructed that thereafter, if either of them charged a reasonable professional fee, he was naturally set down as a swindler.

By their joint efforts, however, they succeeded in proving to the public that neither of them were worthy of patronage, and as a consequence one or two other dentists were induced to settle there to fill a professional vacuum.

A dentist who will do anything to degrade the profession in his vicinity to a dental bear garden, as in the instance cited, is worthy of the name¹ of the inseparable friend of Doesticks, whom many will recall in certain droll literature of some thirty years ago.

By courteous treatment, co operation and good will toward neighboring dentists, in a word, by just the opposite course of the one indicated, we may benefit our own practice and in raising the standard of our profession, elevate ourselves with it. And in these considerations, as I view the matter, lies, to a large extent the philosophy of our general Code of Ethics.

¹ For the benefit of the younger members of our profession it may be proper to state that the name of the friend and companion of the inimitable Doesticks was simply Mr. Damphool. I will add that the sentiments and allusions in this little article have no allusion whatever to my immediate dental neighbors. They all seem to have learned in their youth with myself, the charming and classic sentiment:

Let dogs delight to bark and bite;
For 'tis their nature to;
But children you should never let
Such angry passions rise,
Your little hands were never made
To tear each other's eyes.

"GOLD PLATES."

BY THEODORE LEDYARD, M. D.

In making gold plates for the lower jaw where one or more teeth remain, the following plan may not be generally known.

We will suppose the case to be minus the bicuspid and molars, the six front teeth remaining. Instead of cutting a pattern in one piece, let there be two; one to extend on one side around in front to where the first bicuspid would be on the opposite side, and *vice versa* for the other pattern. Use No. 30 plate, and 20 carat gold looks the best, used with the same fineness in solder. This will give a plate that can be easily swaged. Swage separately with each half on a good sharp zinc die. Select one half to go next the teeth and the other to lap over it. Drive the under one sharply around and between the teeth with a softened nail, having its point prepared for the purpose. Anneal and place both on the zinc and swage again. Now notice how nicely they fit one to the other. Catch them with a bit of solder and swag again. Then apply clean, creamy borax thoroughly between the plates, (and perhaps the best way is with a camel's hair pencil brush), then put on solder and run them together. This will give a sharp, strong plate, and more strength may be added by placing a gold wire (No. 18) at the lower inner edge. It also relieves the sharpness.

Whether plate or rubber teeth be used, this, if finished handsomely, will give a most desirable plate, providing the minor details have received their due attention.

In using sand and plaster to invest soldering cases, I find three of sand and one of plaster does better than if less sand be used; it is not so liable to crack and warp, especially if the plaster be very coarse and the sand sharp. It is only necessary to have sufficient plaster to hold the particles of sand together. More than this is too much and leads to cracking.

CORRESPONDENCE.

AN OBSERVER'S LETTER.

NEW YORK CITY, March 2, 1887.

We find, as the months rapidly come and go, there is certainly no dearth of topics from which to compose a letter for your journal, but we do find at times a necessity for discretion in the composition of the letters, and we think never so much as at the present writing.

We attended the regular meeting of the Brooklyn Society Monday evening of February 28. There was a good attendance, mostly of the younger members, with a noticeable absence of others. The Society was favored with a lecture by Dr. Ayers, one of Brooklyn's ablest physicians. His subject was physiology based upon the biplassion theory. It was a rich treat, which was given in an original style of simplicity of comprehensiveness, such as we seldom hear. When we say that Dr. Atkinson had scarcely any cause for criticism and was full of commendations, saying that he had never (hardly ever) listened to a speaker that so fully accorded with his views, particularly a medical gentleman, this conveys some idea of what the Society had before them. I wish we could take time and space and give an abstract. This suggests that the Society owes it, not only to themselves, but to the entire profession to publish such proceedings. The Society is bearing burdens that ought to be lifted from it—by this I mean deadwood. There is a great lack of disposition to do justice to the profession of Brooklyn by Brooklyn's own practitioners. It is much commented upon. Men who will neglect home interests and build up foreign ones, are not contributing honor to themselves. The Society has moved to do a very nice



thing as a tribute to skill, by presenting a gold medal to Dr. Rolla Knapp, of New Orleans, who made to them an exhibit of his unique system of constructing crown work, which is, and has been so much admired by all who have been favored with a view of it. A moral here. More men go to a premature grave by discouragement than by encouragement. We are more apt to be jealous of good works of our near neighbors than generous. We have looked forward to the monthly (March) meeting of the First District Society with a little of curiosity mingled with some apprehension. Earthquakes prove the danger of violent inward commotions, but if they can be diverted good results will or may follow. After the experience of the last evening's gathering (March 1) of the Society, it is possible that this will prove true. A very interesting extemporaneous address was delivered by Dr. Mellotte, of Ithaca, N. Y., descriptive of his "improved construction of Bridge and crown work." As it will appear in the *Cosmos*, we will not add more than to say that it was listened to with marked attention. This was illustrated by a mammoth model capable of being taken apart showing all the emphasized points of improvement. The Doctor's heart and hands are good friends, and he is thoroughly honest and earnest, really a natural teacher, and would be an honor to any school. This address was followed by an interesting and well prepared paper by Dr. J. Howard Reed, "The Teeth of the Basket Makers." This had points of interest to searchers of science relating to pre-natal origin and will interest the student on general principles. Considering what was in store for the large number of dentists present, as announced later in the evening, the arrival of Attorney Gordon, counsel for the dentists in the suit with the International Tooth Crown Company, all went smoothly. This suit has come to a decision and Mr. Gordon's interpretation of it was a subject of much interest. It is this in a nut-shell. All liberty is given to the construction of any and all kinds of crowns. The court has given this company the control of the Low patent, and this means that all of the so-called Richmond bridges must pay tribute to the Dr. Low

patent, for his principles are involved in their construction. Mr. Gordon did not feel himself clear just how broad a construction would be put on these operations by the court. He told the dentists they were not safe to stop at this juncture, for the court had tried to make the construction so that it might give the company some redress for the large expense that they had put out by introducing this "acknowledged valuable branch of dental service to the attention of the public and the dental world." His advice was urgently impressed upon the minds of the dentists, that their only safe course was to carry it to the highest court and know the ultimate. He paid a high tribute to Dr. Northrup and others for coming to his service and contributing every needful aid for bringing out the best results. He paid also a high tribute to Dr. Cassius M. Richmond and his brother for refusing a truce of free and perpetual license, (which he advised before he knew the dentists position) as a settlement with the International Tooth Crown Company, and said they had acted a part of honor towards the profession in this that ought to be appreciated.

At the meeting of the American Dental Association held in Boston in 1865, Dr. Atkinson being on a committee for considering a similar state of affairs with the rubber question advised the raising of a sum of money and carrying that matter to the highest tribunal. It was not heeded. Too many know what took place. Mr. Gordon repeats the advice in this case. *Will it be done?* A report of the clinic Tuesday, p. m., which was a large and interesting one, brings our letter to a close, with an added postscript of interest.

Over eighty were present at the clinic. Dr. Mellotte exhibited his compound oxygen blow-pipe, simplified from the Knapp plan and by this much reduced in price. It was a feature of much interest—also his folding portable office work bench; this is an article desired by many. Dr. Star (the mechanical star), of the S. S. W. Co., explained his method of combining gold and silver which, by the oxydizing of the silver an action is made upon the sulphur in the rubber which makes an indestructible attachment for a lining to the plate.

Dr. Thayer, of Brooklyn, called attention to a still further modification of the blow of his "Trip Hammer Mallet," making it less noisy. Dr. John Crowell gave a practical illustration of fusing enamel body upon gold by the blow-pipe; much interest was shown in his work. If we remember rightly Dr. Crowell gave us the present beautiful forms of the continuous gum teeth. Dr. Oliver called attention to a new obtunder for general use—sensitive dentine and surgical uses; of its formula we know nothing. Dr. Morey, the inventor of the drill bearing his name, exhibited a trueing drill for use in root canals preparatory for crown work. Dr. Watkins, of Montclair, N. J., presented a model showing the anterior superior teeth behind the inferior, and asked counsel for treatment. He was advised to place a plate upon the grinding surfaces of the teeth so that the occlusion would be broken and attach to this a platinum and iridium bar carrying it in front of the teeth, and by the use of rubber rings draw the teeth forward: so that they would shut over the lower ones. the patient being but 12 years of age, trusting to the development to make all things right. After the sufficient movement of the teeth, insert a retaining plate. The model in plaster was much admired for its neatness of skilful construction. This was made by a young student of only two months experience. How few older practitioners show much taste in this line. Dr. Mills presented a case of regulation of much interest in process, the patient nearly 15 years of age (a lad), the models showing the case at the beginning—in progress—and by the case in person, as it was at the present time. The superior arch at the beginning being contracted by the bicuspid and molars on each side. These were put in position by the Coffin plate, the anterior ones being much cramped and overriding each other were placed in position, all but the lateral incisor, by the same kind of fixture just described with the bar a la Atkinson--this partially--the latter had stood much behind the cuspid and central and being turned a good deal on its axis and resting on the cutting edge of the inferior teeth, had caused an abnormal occlusion during the development, so that the teeth only occluded on the pos-

terior cusps of the first and second molars. At the present date this is being gradually closed by grinding from time to time the prominent cusps and the pressure is also used to help develop the partially regulated lateral into its right position. This case has demonstrated the efficacy of combined methods. Dr. Robinson, of Brooklyn, brought a case of interest for counsel. A superior central had been extracted for chronic alveolar abscess and there was left a small territory of necrosis or caries. He was advised for treatment to burr this away. The patient was a lady, almost the age of secrecy, and a little pinched in temperament.

P. S. (A.)—We are advised to call attention to the fact that a report was sent to all the journals—at least nine of them—of the conference meeting consisting of a large number of dentists well known, held during the days of the anniversary meeting in New York. This was at the Sturtevant House, and for the purpose of considering the advisability of taking steps for the organization of an International Dental Congress at some future time. Attention to this subject here, is for the purpose of giving general information, so that a feeling of distrust may be removed which has been indulged in by a certain few, and more, there is a disposition to persist that the movement still means discord. Nothing could be farther from the truth. We think these agitators against all reason, will appear far better in the annals of history, if they will be silent. We notice that those who clamor for fair play so freely often set a very poor example.

We have just learned that Dr. J. L. Williams, of New York, sails this week for Europe. He goes for an extended trip over the continent, for pleasure and profit. The doctor is so widely known by his brilliant writings with which he has favored the readers of the *Cosmos*, both of embryology, and his system of crown and bridge work, that it will be but necessary to note the fact of his foreign visit, feeling that those on the alert for the latest and best, will improve the opportunity of making his personal acquaintance. His qualifications as a speaker, writer and finger craft will make him a profit to any organized or un-

organized body of dentists that may give him their attention.

It is generally conceded in this country that he has no equal for his age for brilliant attainments, and our admiration of him and coupled with good wishes, we feel like giving him a generous notice. As his name has adorned the editorial staff of the ARCHIVES, this can only be in accord with the present management.

It is hoped that the doctor will be secured during his trip to give this journal a monthly letter. OBSERVER.

CHICAGO LETTER.

CHICAGO, Ill., April, 1 1887.

EDITOR ARCHIVES:--The annual commencement season of the dental colleges of the Garden City has come and gone, and with it about forty young men have been thrown upon the mercy of a cold and unappreciative world to "dig or die," to succeed or fail, as the case may be, but one of which they will be certain to do.

Only a very small number ever reach the pinnacle of fame or success. Many, after a short trial, fall out by the way, while the greater number eke out only a bear hand-to-mouth existence.

The profession is already crowded with ordinary men, and yet some of our dental faculties hold out to students the encouragement of a remunerative practice as soon as they have gained the legal right to append to their names the all-powerful title of D. D. S.—their reasons for holding out such encouragement, false though it be, we will not name, but certainly it is not the elevation of the profession. With many alas! it proves but an apple of Sodom, and the hopes which they were encouraged to entertain, turn to ashes in their teeth.

Ordinary practitioners are not needed in the profession, and some means should be adopted when they apply for admission to our colleges, for their own sake, and that of the public, to turn their energies in directions where they would be more likely to prove successful.

The old idea so prevalent in this country that the demonstration of a little mechanical ingenuity on the part of a young man qualified him for the study and practice of dentistry has had a very degrading effect upon the scientific status of the profession. These young men have entered the profession as mechanics—believing that manipulative skill in the packing of gold and constructing artificial dentures were the only departments of study worthy their attention.

As a result of this preconceived notion, and we are sorry to say, strengthened many times by the teaching of some of our colleges, American dentists as a class are woefully deficient in scientific attainments. Our brethren across the Atlantic have gone to the other extreme, and as a result their mechanical operations are very much below the standard of excellence obtained in America, while in scientific training they have gone far beyond us.

What we need in America is more thorough scientific training of the young men entering the ranks of dentistry, with a higher grade of preliminary and final examinations.

Many young men are allowed to begin their studies of dentistry totally unqualified. The preliminary examinations as conducted by many of our colleges is a mere farce, and students are graduated who are a disgrace to the profession.

The entrance and final examinations of all students should be conducted by a board independent of the college faculties. The power to grant license to practice should be taken from the colleges and vested in a State Board. The boards of the various States could agree upon a standard of qualifications and thus make the examinations uniform all over the country, while the certificate would then be accepted in any State as qualifications to practice.

The State Board of Dental Examiners would be the proper authorities to perform this service, and they should be allowed to charge a sufficient fee to pay them for the time expended.

If some such plan could be set in operation American dentistry would soon reach a position which would make it doubly honorable.

Medicine is in no better condition in these respects than dentistry. Many of our medical brethren in this State feel very keenly the need of some such reform as that just hinted at, and it is more than likely that steps will be taken during the coming summer to inaugurate the movement.

Why not make common cause with our medical^h brethren, and ask the Legislature to so amend the present laws as to place the power to grant license to practice in the hands of the State Board of Dental Examiners?

The passage of such a law would not only close up the inferior colleges and give us better qualified dentists, but it would protect the public from incompetent and charlatan practitioners.

DENTATUS.

I FORESEE the dawn of the new literature which all peoples may claim as their own, for all peoples have contributed to its foundation.

GOETHE.

THERE ARE many ways of being frivolous, only one way of being intellectually great; that is by honest labor.

SIDNEY SMITH.

The widow of the late Dr. Von Gudden, who lost his life caring for the insane king of Bavaria, has received from the Bavarian government a gift of \$50,000. This is a God-send to her, as the lamented doctor was blessed with eleven children who are all living.

MASKING THE ODOR OF IODOFORM is accomplished, according to Oppler, by the admixture of freshly roasted coffee.

Brunelli claims that a mixture of one part of finely powdered camphor with three parts of iodoform completely masks the odor of the latter.

EULYLYPTOL is the name given by Dr. Schmeltz to a mixture containing six parts of salicylic acid to one part of carbolic acid and eucalyptol, and which he considers a better antiseptic than iodoform, corrosive sublimate or carbolic acid. A small quantity added to urine will preserve it for months.—*Journal American Medical Association.*

EDITORIAL.

BLEACHING TEETH.

The bleaching of discolored teeth is accomplished by means of free chlorine or sulphurous acid. The following treatment gives free chlorine. The preparation is composed of equal parts of dry chlorinated lime and tartaric acid, mixing them together dry and, adding a little of the acid at a time, the mixture should be kept in a glass-stoppered bottle. Chlorinated lime made into a thin paste with chloroform is also recommended. Previous to placing any bleaching agent in a tooth be sure to close the apex, then insert the agent and secure with gutta-percha or any of the zinc preparations.

"More than one application may be required, after which the cavity should be thoroughly cleansed, and a temporary filling of the whitest shade of the oxychloride of zinc filling material be introduced and worn for some time, after which a more durable gold filling can be inserted."¹

Dr. E. C. Kirk has successfully employed sulphite of soda in combination with boracic acid, for bleaching discolored teeth. His formula is: Sodii sulphitis, gr. 100; acid boracis, gr. 70. Mix and grind together in a warm, dry mortar to a fine powder, keep in an air-tight stoppered bottle, placed where it will keep dry.

His method of using the above is as follows: Having adjusted the rubber dam to the tooth to be treated, and one adjoining it on each side, the cavity of decay is cleansed of all debris and the root filled with gold or gutta-percha for half its length. The powder is packed into the remaining portion of the canal and cavity of decay, leaving room to insert a tempo-

¹Dental Medicine, page 205.

rary filling of gutta-percha. After the powder has been properly packed, a drop of water is permitted to fall upon it from a drop-tube or a pellet of cotton, the object being to dampen the powder, not to wash it out; then insert temporary filling; a second or third application may be necessary. When the water is added a chemical reaction takes place, liberating sulphurous acid, upon which the bleaching powder depends.¹

Dr. Harlan has found good results from the following method, but says: "No single method can be used satisfactorily for all cases." Treat the tooth as indicated above, then wash the cavity several times with fresh peroxide of hydrogen, and place a few crystals of chloride of alumina in the cavity, moisten them with peroxide, and wait from three to five minutes, wash the cavity thoroughly with distilled water, then apply a solution of 30 grains of borax to the ounce of water, until the acid is entirely neutralized. Dry the cavity with hot air and paint the interior with copal ether varnish. When it is dry mix oxychloride of zinc of the desired color and fill the cavity full; allow it to harden, then prepare the cavity for the gold filling and fill it at once. It should be noted that the whole operation is made at one sitting, and that oxyphosphate of zinc is not recommended as a lining for the cavity, or base for the gold filling. We have given three different ways of bleaching teeth out of which you may select the one that best suits your convenience. The last one is indicated where but one sitting can be given by the patient.

A fourth mode of bleaching is as follows: Fill the pulp canal with pulverized alum and wet it with Labarraque's solution of chlorinated soda. This, like the third, can be used at one sitting, but a few minutes being required to complete the bleaching.

H.

DENTAL RECORDS AND BILLS.

No doubt many have been annoyed by their system of keeping records. I have adopted the following, which simplifies matters. I use the Morrison Appointment Book and

¹ Dental Medicine, page 332.

Allport Dental Register. After the patient has departed, make a note of the operation and the charge; the operation is marked as follows: 1 or any number of gold fillings is noted by the simple numeral, $\times$ after the numeral indicates amalgam; Cem., cement; g. p., gutta-percha; T., for tin; T. G., tin and gold. Frequently as possible, daily is best, the register is filled out indicating the size and location of the filling on the diagram.

My blank bills are printed with a stub, having ledger page, name, amt., when presented. These blanks are filled and the stub torn off and placed in a pigeon hole. On the first and fifteenth of each month the stubs are looked over, those for accounts paid are destroyed, and new bills made out and sent to delinquents. The stubs are easily run over and indicate just who have not paid, otherwise one has to look through the entire record to find unpaid accounts.

The following mode of indicating the tooth filled and location of filling may be used in the appointment book: $+^{\circ 6}$ shows that a mesial crown filling has been made in the superior left first molar. $+^{\circ 1}$ indicates a filling in mesial surface of superior left central incisor; $+^{\circ}_6$ and $+^{\circ}_1$ indicates the same operation for same teeth in lower jaw, left side; a figure above the horizontal line indicates an upper tooth, the figure on the left or right of vertical line indicates left or right tooth. H.

METHODS OF TEACHING.

Dr. R. B. Adair and Master Rob, of Gainesville, Ga., are having a nice time "on the wing." Dr. A.'s plan of gaining knowledge is worthy of imitation. In a letter to the *Southern Dental Journal*, February, he says: "I am investigating dental colleges and methods of teaching, too, and will give my ideas at some future time. I have always, as you know, been a strong advocate for separate special dental schools, but am gradually crawling over to the advocacy of a thorough medical education, after which take a course in a polytechnic den-

tal infirmary, presided over by the ablest men in the profession." The above reminds me of a conversation I had with Prof. Taft, one of the "ablest men in the profession." He thought that those men who first took the degree of D.D.S. and then M.D., made the best dentists; that the degree M.D. coming first spoiled them for future work in a dental college.

H.

UNCOVER THE LIGHT IN WISCONSIN.

That Vermont shoemaker, who, when asked if he had any religion, made answer "yes, just enough to make good shoes, glory to God," represents a large class of the dental profession in Wisconsin. They glorify themselves in being able to display the best practical results from experience and investigation, but as exhorters and camp meeting enthusiasts, they don't seem to hold their own with some delegations to the "Salvation Army." If it is to be a part of your local missionary's work to arouse the dormant energies of these worldly men and point out to them the error of their way in this regard, why, let this be a starter in that direction.

Contributions to the "Missionary Fund" have been promised from a few, but we want every one who has a garment he thinks will warm or amuse a heathen, or satisfy the cravings of hunger in some less fortunate individual, to send it in. The plan adopted by the ARCHIVES is a good one and, when the profession once "catch on to it" and are stimulated to make it successful, there ought to be no need to urge our members to contribute what they are capable of doing.

E. P.

WIRE LIGATURES.

The most practical of the recent little suggestions that have been going the rounds of our dental journals is the one, first made known to the profession—if we are correctly informed—by Dr. Geo. Keely, of Oxford, Ohio, viz., the substitution in

special cases, of wire for the silk ligature for holding the rubber-dam. We have experienced so much satisfaction from the adoption of this suggestion in two recent cases that we are prompted to give the details for the benefit of those who may not have been led to test it practically.

CASE A.—A second inferior bicuspid, a pin hole cavity at the margin of the gum on the mesio-lingual angle. Embraced three teeth with the dam, tried the silk ligature but could not force it low enough to expose the cavity to view. Taking a piece of annealed binding wire about one and one-half inches in length and bending it in the form of a staple, passed the legs through between the teeth, at their necks, from the lingual side, embracing the bicuspid. Our assistant grasped the ends with a small pin-vice and twisted them together till the wire was drawn tightly around the neck. During the process of twisting, we forced the wire down upon the lingual surface, carrying the dam and gum with it until the cavity was fully exposed. The vice was removed and the exposed ends of the wire bent over to prevent perforating the dam. This little device kept its position perfectly during the subsequent steps of the operation; preparation of the cavity and filling with gold, reducing a difficult case to a simple one.

CASE B.—A superior central incisor, an oblong cavity at the margin of the gum on the labial surface. Gums and teeth extremely sensitive. Dried the surface of the gum over the tooth, and applied cocaine 5 per cent solution. Making two applications; applied the dam to three teeth, using silk for the lateral and opposite central; then applied the wire as in Case A, to the tooth to be filled, and found no difficulty in carrying the dam and gum up entirely out of the way and retaining it there until the operation was completed, and without causing any pain, the cocaine acting promptly and efficiently in this case as an anesthetic, so much so that my patient slept during almost the entire operation.

“A GREAT idea lifts us above the power of evil.”

OUR SCHEME.

In our January issue we announced a novel scheme evolved for the conduct of the ARCHIVES, the details of which were promised for a future number. The title page for March is an exposé of our plan, in the main. We have entered upon the work of making of the ARCHIVES a live, newsy, cosmopolitan dental journal, without encroaching upon the domain of any of our contemporaries, and trust that none of our confreres will let the "green-eyed monster" make them unhappy if they should discern in our array of collaborators the elements of success.

As editors, we are all working for the edification and elevation of the profession, by the promulgation and dissemination of dental truth and light, and as an humble member of the corps, we hope by courteous conduct to maintain the amicable relation now existing among us. We have started out to cultivate a new field, and have adopted a new method of cultivation, and our title page will advise our readers of the laborers engaged in our vineyard. Let each man but do his duty and the ARCHIVES will be what we have promised for it, and what its name indicates—a reliable record of dental facts and fancies, as they are promulgated in different parts of the Dental World.

There has been some complaint in the past on the part of subscribers to the ARCHIVES, of not receiving the journal on time, and in some cases of not receiving it at all. The journal will, in the future, be mailed to all subscribers on our list promptly on the *tenth* of each month, commencing with this number. Should any subscriber fail to receive his copy, he will confer a favor on us by sending notice at once, that the fault may be corrected.

The Editor-in-Chief is not responsible for the views or opinions expressed by correspondents.

State Editors will, so far as practicable, edit all correspondence sent from their respective states.

Original articles should be short, containing not more than 1,000 words, and should be in the hands of the printer by the fifteenth of the month previous to date of publication.

Correspondence should be in hand not later than the twentieth of the preceeding month. Editorial matter by the twenty-fifth.

TRANSLATION.

BY M. FLAGG.

Translated from *Le Progrès Dentaire*.

DENTAL AFFECTIONS OF DOGS.

A wide and new field for investigation has been opened by Mr. Capitan, who shows the skull of a dog on which one can establish the existence of dental diseases absolutely recalling those which have been noticed in the human species. On nearly all the teeth there exist dental erosions corresponding to the types called pointed, cup-formed and raised. These affections are exclusively on the enamel, they are sharply contoured, and in no way resemble dental cavities, and further, they always exist symmetrically on homologous teeth of the same jaw. Nearly all teeth are affected.

On an inferior canine can be found depressions in different heights, and occupying exactly the same position as those on the other side. On the molars the erosions are usually hollow, following a horizontal plane. One finds it identical on each side. It seems hardly possible to admit, as an explanation of these facts, anything else than a general trouble of nutrition. But then, what is the cause of this general affection of nutrition? Mr. Magitot regards these injuries as identical to those first described by Hutchinson as occurring in man. He does not hesitate to find here a powerful argument against the theory of Mr. Parot, who, as it is well known, attributes these dental affections to syphilis, and on the contrary a confirmation of his theory which considers these injuries as always produced by nervous accidents, chiefly when happening at the time of the eruption of the teeth. But one knows that frequently the sickness of young dogs is accompanied by convul-

sions. To support this opinion a veterinary who has largely studied dogs, Mr. Pietrement claims to have observed many times in dogs these dental affections, to which he had attached no importance until now. One may observe it commonly on hunting dogs, mainly on dogs of the so-called Saint Germain race. These animals are very nervous, and much more subject to convulsions than other dogs. Mr. Parot does not believe that one can identify the injuries in these dogs with those of man. He considers, therefore, the arguments of Mr. Magitot are without foundation in their essence. He maintains absolutely what he has always professed, namely, that the dental erosions in man are always an index of hereditary syphilis.

"HUMILITY is clear vision."

"HEAVEN harmony is universal love."

COOPER.

"THE power we possess is the seed of all we are to possess."

"GOD OFFERS to every mind the choice between truth and repose."

EMERSON

"THERE are no failures in life more pitiable than those which result from too much success."

"YOU owe your leisure to the man who works. Then study for him. You are his debtor. You owe your mind to him; then use your mind for him. Give it. This is a great duty."

CHANNING.

"THE greater a man is, the less he is disposed to show his greatness. True nobility of soul rises above and suppresses the love of show." Tittles, for instance.

CHANNING.

SEPSICOLYTIN.—Peckolt has obtained from the tapioca root a substance which he finds possessed of active antiseptic properties. It has been given the name of sepsicolytin or fermentation-hinderer. A quantity of albumen containing a very small quantity of the agent, presented no evidences of decomposition after six months exposure. It is not poisonous, which is an important fact in its favor.—*Ex.*

SOCIETIES.

IOWA STATE DENTAL SOCIETY.

The twenty-fifth annual meeting of the Iowa State Dental Society will be held in Cedar Rapids, beginning the first Tuesday in May, continuing four days.

Officers—President, L. E. Rogers; Vice-President, W. H. Baird; Secretary, J. B. Monfort; Treasurer, J. S. Kulp.

A programme has been prepared which cannot fail to interest every dentist. The clinical programme will be an important part. There will be about twenty-four different clinics. Gold fillings by hand pressure, Hand mallet, Automatic and pneumatic mallets. Bridge-work will be demonstrated. Clinics in several different crowns. Treatment of pyorrhea alveolaris. Implantation of teeth. This operation will be performed by Prof. Eames of St. Louis, giving dentists an opportunity to see this new operation. An invitation is extended to all dentists

J. B. MONFORT, D. D. S.,

Secretary.

PRELIMINARY ANNOUNCEMENT.

PEORIA, Ill., March 3, 1887.

The Executive Committee of the Illinois State Dental Society announces the following list of essays for the next annual meeting, which will be held at Jacksonville, the second Tuesday in May next:

Dr. Norman J. Roberts, of Waukegan, "Regulating Appliances;" Dr. Homer Judd, of Alton, "Retention of Pulpless Teeth in the Jaws;" Dr. A. W. Harlan, of Chicago, "Practical Therapeutics, with Notes on the Application of Special

Drugs;" L. C. Ingersoll, of Keokuk, Iowa, "Medicinal Stimulants;" Dr. Truman W. Brophy, of Chicago, "Diagnosis of Oral Tumors;" Dr. W. N. Morrison, of St. Louis, Mo., "Operative Dentistry as Applied to Deciduous Teeth;" Dr. L. L. Davis, of Chicago, "The Microscope and its Uses in Progressive Dentistry."

The culture of micro-organisms will be continued by Drs. Black and Moody, and an essay is expected from one of them, embracing the results of their investigations.

The clinic, under the supervision of Dr. C. F. Mattison, is expected to be unusually interesting.

E. J. GREENE,
W. H. TAGGART,
P. J. KERSTER,
Executive Committee.

CENTRAL DENTAL SOCIETY OF NORTHERN NEW JERSEY.

NEWARK, N. J., March 22, 1887.

EDITOR ARCHIVES:—To use an Irish Bull, last night was a great day with the "Central Dental Society of Northern New Jersey."

Notice cards had gone out, stating that Dr. Kingsley and Prof. Flagg would read papers on "The Relation of Dentistry to Medicine," and that Prof. Abbott, and Drs. Marvin, Stockton, Dwinelle and Rich would discuss the same.

The big array of names, or the array of big names, brought out the crowd, and as they say in the theatre sometimes, "standing room only was to be had."

Prof. Abbott was not present, having gone South on a little vacation, Dr. Marvin's name was used without authority from him and he was absent.

Dr. Kingsley chose the "Central" as the place of his reply to Dr. Marvin's paper, because he was quite sure of a kindly reception, "he being in with the boys"—the jury was packed.

He was at his best, and thought he made the proof conclusive, that dentistry has nothing to do with medicine, and said that he was a dentist, and therefore dentistry was a profession.

Prof. Flagg followed in very much the same line, only going a little farther, I think, and claiming that a dentist was a better dentist without a medical education. He was a dentist, too, and could not tell a case of small-pox from whooping cough, and advised all to let medicine alone, as there was forty times as much in Dentistry. So you see I spell it with a big "D" this time.

Dr. Stockton followed, and felt reluctance to respond, as he had expected both Prof. Abbott and Dr. Marvin to wield the battle axe on this occasion. He said: "I cannot subscribe to the sentiment stated here to-night." I am a dentist and do not want to be anything else." I, on the contrary, declare the whole greater than a part—that a knowledge of the whole human frame is better than merely the knowledge of the oral cavity.

The more a man knows the better dentist he will be; the wider and broader the scope of his learning and culture, the better qualified is he to appreciate and care for the treasures committed to his care and skill.

I claim that a man who has been educated to administer remedies for the relief or cure of the diseases of human beings (no matter of what kind) and who practices on the strength of that education, is certainly practising medicine—as much as it is possible for any human being to do.

The man who has been educated to perform the operations in dental and oral surgery, and does them, his relation to general surgery must be that of specialist in surgery. The foundation of our successful treatment, like that of all specialists of the healing art, lies in a knowledge of the human body—the physiological action which keeps it in operation, and the changes to a condition of pathology—and the proper treatment of those pathological conditions. This belongs to us just as much as to medicine, and I claim that no man is a proper person to practice dentistry unless he knows what these

changes are, because any day of his practice he is called upon to administer remedies and should know their effect.

If those who call themselves dentists are lacking in these fundamental principles and this medical knowledge, they are at liberty to assume that they are in no way related to medicine or surgery, and no one, I think, will question their position. Let them be content with their place, and let others—who assume a different and more exalted position—alone.

The relation of dental surgery to general medicine and surgery is and must be the same as that of any other specialty. Dentistry is a branch of the healing art. You cannot get away from that, and admit it, as has been done to-night, and the foundation of your structure is gone. I am content with the position assumed by the other, the Kingsley's side of this question.

Drs. Dwinelle and Rich followed, stating, however, that they could not advance anything beyond what had already been so well said by Drs. Kingsley and Flagg.

Dr. Atkinson (grand old patriarch, always on the side of progress) and Dr. Niles came manfully to the help of the little Jerseyman in the battle against the giants.

Kingsley says he has "fought his last battle," and henceforth and forever-more desires to live in peace and harmony with all men.

My good friend Flagg went to his happy Quaker home, doubtless rejoicing, that medicine as connected with dentistry would never again be heard of. But then a few years ago he enunciated a "New Departure," that gold was "the worst material for filling teeth:" and to-day, I suppose, is tucking his head under the wing of that delusion, and believes that only amalgam is used for filling teeth, and so the effect of the great meeting will pass into the unknown future, and dentistry will be a part of the healing art, and therefore very closely related to medicine.

Drs. Dwinelle and Rich, both of whom have been about fifty years in the practice of dentistry, are "M. Ds.," and have honored and elevated dentistry, and wherever known are hon-

ored and respected for their personal and professional worth. Both are hale and hearty. "May they live long and prosper."

"CENTRAL."

ILLINOIS STATE DENTAL SOCIETY.

The twenty-third annual meeting of the Illinois State Dental Society will be held at Jacksonville, beginning Tuesday, May 10, and continuing four days.

A full programme of scientific work is arranged for, including a large and instructive clinic.

Dr. Black will give short lectures on micro-organisms, with practical demonstrations of their culture.

All dentists will be cordially welcomed.

CHICAGO, Ill.

J. W. WASSALL,
Secretary.

MISSOURI STATE DENTAL ASSOCIATION.

The next annual meeting of the Missouri State Dental Association will be held at Kansas City the third Tuesday in June—21 to 24 inclusive.

From the indications the programme will be of unusual interest. The clinics will be made a prominent feature of the meeting, and all the new features in operative dentistry and new inventions will be practically demonstrated.

The profession in Kansas City are making every effort to give the visiting dentists a hearty welcome. Every dentist in Missouri is expected to be present. Our old friends in Kansas will be there in full force, and prominent members of the profession from Iowa, Illinois and Nebraska have signified their intentions to be with us.

WILLIAM CONRAD, President.

JOHN G. HARPER,
Recording Secretary.

CHICAGO COLLEGE OF DENTAL SURGERY.

The Fifth Annual Commencement was held at the Grand Opera House, Monday, March 28, 1887, at 2:30 p. m.

The exercises consisted of: Prayer, Rev. H. G. Perry, A. M.; Dean's Report, Prof. Truman W. Brophy; Conferring of Degrees, Dr. J. A. Swazey, President; Valedictory Address, James R. Pagin, D. D. S., of the class; Faculty Address, Prof. A. W. Harlan.

The graduates were: Dewitt Clinton Bacon, Henry Cliff Ballard, Charles Edwin Bentley, Thomas Albert Broadbent, B. S., Charles Dibble Calkins, M. D., Charles Wilkins Coltrin, Walter Scott Conn, William Henry Damon, Ernest Edward Davis, Charles Perry Deming, Frank Armstrong Dodge, Joseph Henry Goodearle, Edmund Jerome Hart, George William Haskins, Luther David Henderson, James Eucherius Keefe, John Liggett, Elgion Mawhinney, William Evans Morris, Arthur Nelson, M. Eugene Norton, Henry O'Brien, James Richard Pagin, Harry Norris Pitt, John Henry Reed, Charles Christian Rosenkranz, Otto Eberhardt Seeglitz, Frank Garner Stover, Chester James Underwood, Harry Elmer Wade, Henry Palmer Wadsworth, Julius Albert Waschkuhn, Frank Charles Wermuth, George Nelson West, Harry H. Wilson, William Witt, and Frank H. Zinn.

DEATH FROM THE USE OF COCAINE.—Professor Kalomnin, of St. Petersburg, recently administeted to a young woman nearly twenty-four grains of the hydrochlorate of cocaine in four rectal injections, in order to remove a tuberculous ulcer of the rectum.

The anæsthesia was even then only partial. The pulse was rapid. After forty-five minutes the pulse became very feeble, the respiration labored, the face and hands became livid. Notwithstanding every effort at restoration including faradization, artificial respiration, subcutaneous injections of ether and ammonia, stimulating enemata, and inhalation of oxygen, death followed from the toxic action of the cocaine.—*Medical Times*.

SELECTIONS.

THE REUNION OF SEVERED DIGITS—LITERATURE OF THE SUBJECT.

Referring to a case of Dr. Souther, reported in the *Boston Medical and Surgical Journal*, and quoted in *The Medical Record*, Dr. J. J. Morrissey, of Hartford, Conn., reports the following: "A young man had the misfortune to have his thumb amputated by a hay-cutter, as cleanly as if it were done by the keenest knife. Fully recognizing the importance of the thumb, as the man was a printer, I approximated the parts as closely as possible, yet with little hope of obtaining a good result. I afterward adjusted a splint, and the healing process took place almost immediately. In the course of a month he was able to return to his work, and now, some eight months later, he has the perfect use of his thumb. I confess that I did not hope for such a gratifying result, and it was only as a sort of experiment that I first joined the dissevered parts."

Dr. T. J. Hutton, of Fergus Falls, Minn., writes that the practice of replacing severed digits is not at all uncommon, and refers to the following literature of the subject: "Four cases of digital reunion reported by me may be found in the *Medical and Surgical Reporter* of August 23, 1873. One of these occurred in the practice of Dr. Frew, in 1869, the particulars of which—further than the result—I did not learn. The second occurred in the practice of Dr. E. E. Smith, in 1872; a clerk, helping to unload a huge dry-goods box filled with goods and bound with a projecting hoop-iron band, let it fall to the ground from the dray, severing a finger at the middle of the second phalanx. The third victim was a young man now, while chopping ice on a picnic ground, July 4, 1871, chopped off an index finger with a hatchet. The fourth case I treated

in 1872; a sailor, while discharging his cargo, had his hand forcibly sandwiched between two sharp-edged bars of iron, severing a finger about midway in the second phalanx. In the *St. Louis Weekly Medical Review* for September 18, 1886, appears a short article on 'Reunion of Cut-off Fingers,' from which I quote the following: In *Vratch* for 1881 and 1884, as also in *Tchernigov Zemsky Sbornik*, 1884, we find such cases recorded. The *Medical Record* gives an interesting case reported by Dr. Perkins in 1885. Dr. S. D. Ivanoff records two cases in the *Russkaia Meditzina*. Both cases occurred in healthy sailors, one of whom had accidentally cut away, by a stroke of an axe, the second phalanx of the forefinger of the right hand. The second phalanx of the thumb of the left hand was cut off in the other case. In one, treatment was instituted two hours after the accident, and in the other three hours after the accident. In both there was union by first intention and limited mobility, with a return of sensibility."—*Medical Record*.

TREATMENT OF FISTULAS BY INJECTIONS OF OIL OF TURPENTINE.

Cecchini used with excellent results, injections of oil of turpentine in fistula of the anus, caries of petrous portion of the temporal bone, fistula of the tooth, fistula of Steno's duct, and in fact in all fistulas. He surmised that turpentine excited energetically the granulations, and if used cautiously could do no damage. His results are illustrated by quite a number of detailed histories of cases, and in many of these permanent cure could be established. The injections are generally repeated after three or four days, and Cecchini lays stress that only dull-pointed canulas and tips of syringes should be employed, and by closing the opening of the fistula to obtain a complete moistening of the fistula. The pain caused by these injections could be born exceedingly well, and, if necessary, our author diluted it with oil of almond or olive. Caries of the

petrous portion. He had under his care four children, two of whom had bilateral caries and were completely cured in two and three months time. Here C. commenced the treatment with the greatest precaution, and he injected but a few drops, and when he perceived that the reaction was stood well he became bolder and obtained a rapid cure, cessation of the fetid secretions and complete restoration to health. The injections were every time preceded by an injection of a solution of boric acid. Dental fistulas with more or less extended caries of the alveolar edge and of the jaw. Eight fistulas in five individuals, all cured. In a twenty-four-year-old man an abscess formed in the region of the parotid gland, caused by a buckshot, which occasioned a fistula, then four fistulas formed on the cheek, jaw and on the neck. The fistula of the cheek secreted saliva during the act of mastication. The salivary fistula healed with six injections in thirty days. All seven fistulas were cured within ten to fifty-five days. Two other individuals with lymphatic abscess fistula were cured in twenty-four days and one month. He further reports the good effect of turpentine when the fingers were infected by poison of the cadaver and produced pustules. Iodoform did not excite any beneficial influence.—*Betz. Memorabil*, 3, 1886. *Southern Cal. Pract.*

DO YOUR BEST.—There is something you can do—you “can do your best,” and that is something. A select few do it, thousands do it. We sometimes speak of aristocracies. Those based on wealth and family are not the noblest of the class. This aristocracy, composed of those who “do their best,” is the noblest. The professions are not overcrowded with this sort, but with the other. To be this sort of a man—one that “does his best”—is as easy as to be a Milo, a Michael Angelo, or a Paul. Do you grant it? What then? This. In that difficult but splendid personal trait (if you have it), you have the strong presumption—(I had almost said prophecy)—of success. The man who “does his best” has a passport, sealed with the king’s signet, to some worthy field. There certainly is a place somewhere for such a man. JOSEPH F. TATTLE.

EXTRACTS.

EXTRACTS FROM ANNUAL ADDRESS OF HON. W. W. DODGE.

DELIVERED AT THE COMMENCEMENT OF DENTAL DEPARTMENT
OF THE UNIVERSITY OF IOWA.

How consoling it would be to the ancients, could they but span the ages, and gaze upon the instruments of scientific torture in vogue at the present day. Speaking in the light of sad experience, for I have often been on the rack, to-wit, the operating chair, I would defy old Herodotus, or Egypt's biggest, ugliest mummy, to stand the indescribable pain inflicted by that simple, innocent looking machine called the dental engine. Yet how pleasant the surroundings where this little fellow is called into action.

Your family dentist, a Chesterfield in politeness, escorts you to the chair, which, with its luxuriant cushions, rests in a bay window, filled with blooming flowers and singing birds; the mellow northern light falls upon your upturned face. A maiden fair sweet sixteen, just as pretty as a picture (a conspirator in the of plot), begins to dally with the business end of that infernal machine. The doctor pumps a little more glycerine (not nitro-) into the elevation valve; your chair is raised about three inches; this enables him to rest his elbow more conveniently on the pit of your stomach, and thus gradually stops your breathing. I've never told it before, but when he slyly winks at that rosy-cheeked maiden; and she, with all the heartlessness of an American coquette, plants her dainty foot upon the treadle of the instrument of torture. Well, the trouble begins, the wheel is revolving about 15,000 times to the second, and for the time being you are a firm believer in Bob Ingersolls's theory, "that

all hell is on earth." You are suffering the pains and torments of the damned. The question suddenly arises in your mind, whether you had better choke the dentist or throw the girl out of the window. Just then the front door bell rings, the doctor excuses himself, goes to the door, talks with some other patient a half hour, or more it seems, leaves you in the "chamber of horrors," your mouth filled with an India rubber cloth, a napkin, one or two steel springs between your teeth, and a few other contrivances. You feel and look like a pacing horse being broken to trot, covered with innumerable straps, rings and belts. The maiden, with a careless indifference, is leaning out of the window, sighing for her "Romeo." Why dwell longer on this sad but truthful picture, familiar to you all!

I conceive the Mosaic law to have been grievously misinterpreted, for lo! these centuries past. Why hold that Moses, in promulgating the law of "an eye for an eye, and a *tooth* for a *tooth*," intended thereby to establish the harsh, cruel doctrine of "*Lex Talionis*?" Rather let us attribute the expression to a sincere desire upon his part to aid suffering humanity by the encouragement of dentistry. I consider that Moses, with an intuitive knowledge of the future, foresaw the unhappy, unsatisfactory condition of the toothless man, and may have foreseen the existence of the long-haired Indian doctor, peripatetic practitioner, pulling teeth in front of tents to the sound and beat of music, in the presence of vast crowds—frequently, under the excitement of the moment, "yanking" out the wrong tooth, and was thus irresistably prompted to suggest to future generations, the distinct art of replacing lost or destroyed molars.

EXTRACTS FROM DR. ROOSA'S BOOK "A DOCTOR'S SUGGESTIONS TO THE COMMUNITY."

The admiration and even the gratitude of the crowd are things of today, while the rewards of a devotion to science are eternal.

The fee is to us, what our code of ethics styles it, an *honor*

arium. For, who can estimate in dollars and cents the value of a life saved? Who can set a price to a disabled organ or limb restored to usefulness?

Sir Humphrey Holland, that eminent physician whose life reaches over almost three generations, says of army hospitals of the late Civil War, that he has never seen them equalled, and he has seen those of most nations of the world. All these hospitals were organized and managed, even to the minutest detail, not by practical business men, with great wisdom of finance, but by physicians.

The code (The Code of Medical Ethics), was framed in the interest of the patient. The rule which deprecates even the friendly visits of a physician to a patient of a brother practitioner is an example of the extent to which the protection goes. For how easy it is by a deprecating look or shrug to give a sick friend the idea that, while all that may be very well for him, we never employ such a mode of treatment.

It is certainly wise, and in no respect derogatory to the highest character, for a man to advertise that he has a thousand bales of cotton or a cargo of tea to sell; but where is the honest man who shall presume to advertise that he is a sure healer of the ills of human flesh?

It was a wise man who said that "he that increaseth knowledge increaseth sorrow." All the advancements that are made in the world cause us to be more exacting of our brains, our eyes, our ears and perhaps of all our organs.—*The Doctor*.

THE NEUROTIC TREATMENT OF CATARRH.—Dr. David B. Lees, in a paper on the above subject, thus writes: "If it be true that catarrh is a reflex neurosis, it is clear that a treatment which is essentially diaphoretic must miss the mark. It is to neurotic remedies that we must look for alleviation and cure. The indications for treatment are three: we need to soothe the reflex disturbance of the central nervous system, to quiet the local congestion and hyperesthesia of the nasal mucous membrane, and to arrest the flux if it have already commenced.

"My plan of treatment for the arrest of catarrh is as follows: I keep a strong solution of bromide (1 in 3) and a bottle of tincture of belladonna (B. P.). When I am conscious of having taken cold, I take two or three drams of the bromide solution in a small glass of water—that is to say, forty to sixty grains of bromide. I repeat this dose in six hours, and, if necessary, take a third dose at a similar interval. Meanwhile, as soon as the flux commences, I take twenty drops (equivalent to fifteen minims) of the tincture of belladonna in a little water every hour or two until the throat feels somewhat dry. The painting of the nasal mucous membrane with cocaine solution gives great relief, and powerfully contributes to the cure if the catarrh be severe. Since I hit upon this plan, I have never failed rapidly to arrest my own catarrhs, nor have I failed in any instance in which I have myself been able to superintend the administration of the remedies."

—*Lancet*.

MONTHLY LIST OF PATENTS.

For inventions relating to dentistry, bearing date February 25, 1887, reported expressly for the ARCHIVES OF DENTISTRY by Louis Bagger & Co., mechanical experts and solicitors of patents, Washington, D. C. Advice free.

356,809, dental engine, A. Weber, N. Y.; 357,044, artificial tooth, L. T. Sheffield, New York, N. Y.; 357,421, dental, waste receptacle, T. F. Spencer, Providence R. I.; 357,784, dental anodyne or local anesthetic, R. H. Peak, Orlando, Fla.; 358,282, device for forming dental plugs, J. E. Low, Chicago Ill.

For March 25, 1887—359,798, dental engine handpiece, W. B. Mann, Baltimore, M. D.; 359,773, dental vulcanizing apparatus, F. H. Chidester, and S. J. Harmount, Massillon, Ohio.

BRIEF MENTION.

WE ARE OBLIGED to Friend Barrett, of the *Independent Practitioner*, for his kindly notice of the ARCHIVES in his April number. P. S.—We have not, as yet, as he facetiously adds in a P. S., “appointed forty-seven more editors,” but we expect to get there just the same.”—ED.

THE EFFORT is being made to have President Cleveland and wife visit St. Louis during the meeting of the G. A. R.

THE SECTION of Dental and Oral Surgery in the American Medical Association will be larger and better at the next meeting than heretofore; ten papers have been promised and the indications for a large attendance are good.

A WORKMAN at the Carson mint has discovered that drill points heated to a cherry red and tempered by being driven into a bar of lead will bore through the hardest steel or plate glass without perceptible blunting.

SUCCESS.—1. “Practical success in life depends more upon physical health than is general supposed.”

2. “The success of even professional men depends, in no slight degree, on their physical health.”

3. “The greatness of our great men is quite as much a bodily as a mental one.

BROTHER CATCHING says: “Friend, help us to elevate the standard of dentistry by subscribing for *The Dental Journal*.” We suppose he means the *Southern Dental Journal*. Well, it is one of the dental journals, but why not say: Subscribe for all of the dental journals? We will say it: *Subscribe for all of the dental journals and elevate the standard of dentistry by reading them and writing for same.*—H.

DR. GEORGE M. MORRIS, of East 46th street, N. Y., who was recently operated upon for a deflected nasal bone by Dr. Bosworth, is once more ready to attend to the duties of his profession. Dr. Morris was subjected to the soothing influences of cocaine during Dr. Bosworth's operation, and says that although he was alive to what was going on all the time, and the saw broke twice before the operation was complete, he never felt the first twinge of pain. He also expresses the belief that it is impossible for a man to become habituated to the drug.—*The Doctor*.

HYPODERMIC or other syringes, when clogged so that a fine wire cannot be forced through them, may be cleaned by holding over a spirit flame for a moment, and the foreign matter will be quickly expelled or destroyed, so that liquids may be used immediately. When a wire has rusted in a needle, dip the point into oil, then hold it over a flame, and it can be removed. It is well to draw oil through the point, then heat it, and rust will be removed from the interior; afterwards wash with alcohol, and it is ready for use.—*Dental Review*.

COLORLED soap suds can be easily made by adding a little red analine dye to the water used in making the lather. A very convenient arrangement is to take a beer mug and place a piece of castile soap in it and use an ordinary lather brush; brush the impression with the soap suds, let stand a few minutes, then wash off. This will give a smooth pink surface. Also treat the model with the suds, which will give it a smooth colored exterior.—H.

THE HUMAN RACE is neither as good as the optimist would believe it, nor as bad as the pessimist would make it. A large percentage of all error is due to ignorance and not to intention. But perplexing as is the search for truth, it is wisely ordained; for if the right and wise way were always plain, that important element of character called judgment would almost disappear.—*Mind in Nature*, November, 1886.

DERMATINE is a new isolating material, destined to displace gutta-percha and India rubber.

•

AFTER a searching examination, the German government has permitted the use of all the anilin dyes, except picric acid, for dyeing and coloring even articles of food.

PERMANGATE of cocaine is announced by M. E. Gesel.—*Ex.*

A MEMBER of the Nineteenth Century Club, of New York City, believes that the consumption of candy is very injurious to children.—*Ex.*

PURITY of commercial cocaine.—F. Hartge, in *Der Pharmaceut.* says: Cocaine from six different manufacturers was examined, and only one—Merck's—was found pure.

GLYCERINE has been on the market as a medical substance since 1846.

A ST. PAUL man is possessed with an idea that an application of fresh cat meat every day to his back will cure the lumbago. Though cranky, he is looked on as a public benefactor.—*National Druggist*,—*Requiescat in pace.*

VEGETARIANISM as a doctrine, has had its day. The vegetarian diet is properly a cure. It is useful as a change, and is a cure for one form of dyspepsia, for gout and biliousness. It may be tried with advantage in summer to counteract the evil effects of too much good living in winter. The milk diet or "dairy fare" is a return to nature by another path. Fever patients arriving at Bellevue are put exclusively on milk. The organism, much reduced, comes down to first principles and begins life over again.—*Jour. of Reconstructives*, October, 1886.

THE San Francisco *Argonaut* says that a citizen of Valrosia, Cal., wants to send some of the big red ants of that region, so-called "bull-dog" ants, to surgeons for use in fastening wounds of the intestines. He says that if the edges of two pieces of soft paper are held together, and a bull-dog ant held so that he will clutch both sides, and his head be then quickly twisted off, the ant becomes a fixture in that position. He says that Spanish surgeons use the bull-dog ants as sutures in that way.—*Medical and Surgical Reporter.*

A PHARMACEUTICAL SPECIALTY FOR DENTISTS.

LISTERINE.

FORMULA.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

DOSE.—Internally: One teaspoonful three or more times a day (as indicated), either full strength or diluted with water, or in combination with other drugs. As a local application to ulcers, wounds and abscesses, or as a gargle, mouth-wash, inhalant or injection, it can be used ad libitum, diluted as necessary for varied conditions.

Antiseptic, Prophylactic, Deodorant, Non-Toxic, Non-Irritant, Non-Escharotic, Absolutely Safe, Agreeable, Scientific, and Strictly Professional.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of preventive medicine—individual prophylaxis,

AND THE REQUIREMENTS OF GENERAL

DENTAL ✦ PRACTICE

LISTERINE IS A

Perfect Tooth and Mouth Wash,

NON-SECRET AND PROFESSIONAL,

And therefore has received the Highest Recognition as the Best General Antiseptic for a

DENTIST'S PRESCRIPTION.

Dentists interested in LISTERINE will please send us their address, and receive by return mail, post-paid, our new and complete pamphlet of 36 quarto pages, embodying

A TABULATED EXHIBIT of the Action of LISTERINE upon inert Laboratory Compounds;

FULL AND EXHAUSTIVE REPORTS and Clinical Observations from all sources, both Medical and Dental, confirming the utility of LISTERINE as a general Antiseptic for both Internal and External use; and particularly

MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various Antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. Miller, A. B., Ph. D., D. D. S., Prof. of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

LAMBERT PHARMACAL COMPANY,

116 OLIVE STREET,

ST. LOUIS, MO.

To the Dental Profession.

GENTLEMEN:

After having practiced Dentistry for fourteen years I determined in 1866 to make a Specialty of Dentifrices, with a view of producing an article which should not only be acceptable to the general public, but also be approved and indorsed by the Dental Profession.

In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

They will be found in all the leading stores where such goods are sold, and where Dentists can recommend their patients to call for them. This obviates the necessity of Dentists keeping such preparations, which has proved by experience to be generally unprofitable. I should be pleased to forward a sample of my TABLETS or POWDER to any Dentist, free of expense, on receipt of a postal card giving address, that all may have an opportunity to test its merits. I am,

Respectfully yours,

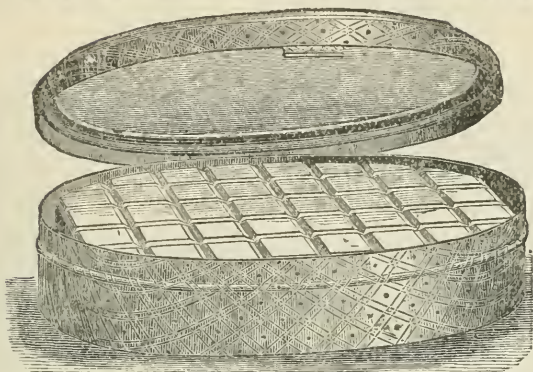
I. W. LYON, D.D.S.,

61 CEDAR STREET, NEW YORK.

New York, March 1, 1884.

ESTABLISHED 1866.

DR. I. W. LYON'S TOOTH TABLETS



For Purity, Efficiency, Neatness and Convenience these Tablets have no equal as a Dentifrice. They are put up in Seamless Metallic Boxes, which are impervious to air and moisture, and may be carried on a journey without danger of breaking.

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—OF THE—

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CHICAGO, February, 1887.

This course will begin Monday, April 5th, and terminate the 22nd of the following June.
This course of instruction will be chiefly of practical nature. There will be two lectures delivered daily—a portion of each hour being occupied in quizzing and recitations—beginning at 8 A. M., thereby enabling the student to occupy the remaining hours in actual practical work in the physiological and chemical laboratories and in clinic rooms, treating and filling teeth, constructing artificial dentines, etc.

The following well-known and competent gentlemen will compose the Spring Faculty :

J. E. Henkins, D.D.S., Lecturer on Chemistry.	J. G. Reid, D.D.S., Lecturer on Materia Medica.
W. Wassall, M.D., D.D.S., Lecturer on Anatomy.	J. D. Moody, D.D.S., Lecturer on Pathology.
Garret Newkirk, M.D., Lecturer on Dental Irregularities and Hygiene.	W. B. Ames, D.D.S., " on Prothetic Dentistry.
L. Davis, D.D.S., Lecturer on Histology and Microscopy.	Louis Ottofy, D.D.S., " on Physiology.
N. Johnson, L.D.S., D.D.S., Lecturer on Operative Dentistry.	Edwin C. Timmerman, D.D.S., Lecturer on Therapeutics.
	Godfrey S. Salomon, [D.D.S., Lecturer on Clinical Dentistry.

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The Spring Course is preliminary to the regular winter course; it is, indeed, the *beginning of the college year*; it assumes that one entering the class is without any knowledge of dentistry, and yet it is prepared to meet the wants of students far advanced in their studies. It is intended to take the place of office instruction, and students without dental knowledge, as well as those more advanced, who wish to avail themselves of the great advantages offered for practical work and instruction are earnestly advised to enter the spring term.

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Lecture Tickets	20.00

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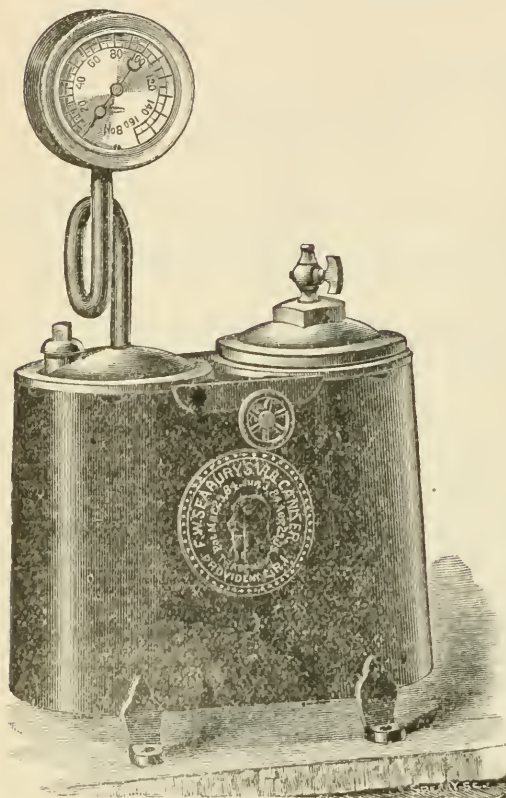
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TO THE PROFESSION.

DEAR DOCTOR:

As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondents, as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

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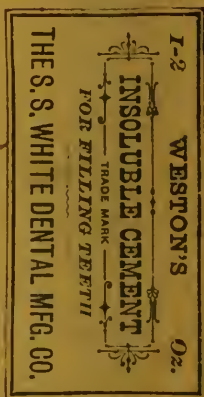
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MAY, 1887.

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MICROSCOPY AND HISTOLOGY FOR OFFICE
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Dental literature has thus far shown a lamentable dearth of works devoted to the special needs of the office students on the subject of dental histology. While numbers of volumes have been issued for the use of the general practitioner none has been published for the special use of the dentist in that particular field of investigation. It is a fascinating pursuit, yet, so far as the observation of the writer has extended he has cause for the belief that the study of the oral tissues and the teeth is seldom undertaken by the office student. It is with the hope of stimulating a desire for investigation that the writer has undertaken the task of assisting him to make a proper beginning and so far as possible afford him aid in the preparation of tissues for their study.

The beginner is at the outset confronted by two difficulties,

one is often a lack of sufficient funds for the purchase of the necessary equipment for the work, the other being a real or assumed lack of time after office hours. The first is only a partial excuse as the circumstances can be overcome by rigid economy; an expense can here and there be avoided, whereby he will, after a time, find himself enabled to make a fair commencement. "His best girl" may not enjoy as much ice cream, and he may not absorb so much nicotine, but he will later on be more familiar with the tissues which he may be called upon to treat and will succeed in proportion as he has rendered himself competent or otherwise. In respect to lack of time there is in nearly every case no valid excuse. He might as well say that he has not the necessary time to earn his living. As a matter of course should he devote his evenings to close study and utilize his spare time in self improvement, the duds and dudines of "society" would miss his companionship, yet he would be the gainer, and possibly the skating rink the loser; the sitters in the corner grocery might note his absence, yet he would enjoy the profit to be derived from the close study of books and a thorough familiarity with the subjects upon which they treat. The objection is often raised by the student that after hours of steady application in the office he needs relaxation. That is very true and nothing is more restful than a change of thought and occupation, and the earnest student will find such rest in the use of his achromatic microscope. Such has been the experience of the writer, and judging from the habit of close application of others similarly engaged, I think that it may be the same with them. No good thing has ever been produced by man without labor and close application, and the advantages which we as students to-day enjoy are the result of the study and close application of others in the past whereby we may profit in the present if we will.

It is a commonly received opinion among those not familiar with the subject that the study of the tissues involves an expense too great to be borne by the average student. My own experience thus far has convinced me that such is not the case. Many, perchance, provide themselves with apparatus which is

more expensive than they need for the line of study which they are pursuing, and generally through ignorance of real necessities for their particular purpose. Of course a microscope is the first necessity, yet at the present time they are afforded at prices not beyond the reach of the average student and good working instruments at that. In the purchase of a suitable instrument there are certain considerations which should not be ignored, and as the writer is not an agent for their sale a few words of advice may be entitled to some consideration. The student should purchase a stand of some reputable make; it should combine the qualities of strength, steadiness, ease of manipulation and provided with both coarse and fine adjustments which work accurately; the coarse adjustment should be a smoothly working rack and pinion, and the fine adjustment should be a delicate micrometer screw.

The first answers for focusing the low powers, but the latter is absolutely necessary for the higher powers and cannot be dispensed with by the histologist; the stand should possess a joint for inclination, as the use of a vertical instrument is very tiresome to the muscles of the neck and is in that respect quite unsatisfactory. It should, if possible, be provided with a draw-tube for increasing the amplification when necessary; every portion of its mechanism should be easy working, yet sufficiently close to prevent vibration or lateral motion; the tube should be at least eight inches in length besides the draw tube; the stage should be of sufficient size to accommodate slides of the largest size and provided with spring clips or, what is better, a slide carrier; it should be firmly attached to the stand and pierced with an opening of size sufficient for the passage of light from the mirror either axial or oblique.

The mirror should, if possible, be double, one side plain and the other concave. If only one is provided it should be the concave.

The bar upon which the mirror is hung should be provided with a joint by which it can be turned above the stage for the reflection of light on objects which are opaque. Such objects can only be viewed satisfactorily with low powers, as the

higher powers are of such short focus that the objective prevents the light from the mirror reaching the object.

The foregoing qualities are embodied in the "New American Model" microscope which, with its various modifications, may be purchased from the different manufacturers of microscopes or their accredited agents. There is, however, considerable difference in the price charged by different dealers for practically the same thing which fact the student can profitably bear in mind when purchasing.

There are certain grades of microscopes made by English and American houses which combine some of the chief advantages of the new American model, but are much cheaper and thoroughly good working instruments. The adjustments are truly working ones and are provided with a joint for inclination.

Having briefly considered the stand we will in like manner consider the objective or lens which is placed nearest the object and through which the first enlarged image of the object is produced to be further amplified by aid of the eyepiece. It is attached to that portion of the tube nearest the stage by what is termed the "society screw" and which is by common consent adopted by the prominent manufacturers in England and America; the objectives of different makers are thereby interchangeable. There are two kinds of objectives manufactured and for two different purposes. The one constitutes a class by itself, and is constructed simply to sell, at least it is valueless for any other purpose. It is generally of foreign manufacture, and possesses limited defining power and in some cases distorts the image through spherical aberration.

The other class is constructed primarily for the purpose of scientific research and is sold afterward. It is classified according to the time and expense incurred in its manufacture and the consequent capability for its intended purpose. There are makers of fine objectives in this country and their work is afforded at a price which is low when the matter of quality is taken into consideration. Objectives are generally designated

by their focal distance from the object to be examined in inches and fractions of an inch. Those of a focal distance of from one inch to one-sixth inch are sufficient for the beginner until he becomes sufficiently expert to enable him to successfully make use of higher powers. The writer would recommend to those who are not familiar with the use of the microscope and are intending to purchase one, that they first purchase and thoroughly study a work entitled "How to Use the Microscope" by John Phin; price is one dollar and the microscopist cannot well afford to be without it.

[CONTINUED.]

THE TREATMENT OF DECIDUOUS TEETH.

BY DR. W. N. MORRISON, ST. LOUIS.

READ BEFORE THE ST. LOUIS DENTAL SOCIETY.

From earliest infancy to old age there are no organs of the body that exert such an influence for good or evil as do the teeth. Take the early age of the infant for instance. What a solicitous time the parents have during the teething period, and how great the ills that attend it, and the fearful amount of mortality that is directly traceable to this period. I think the mother's defective teeth during gestation have a marked effect upon the new being. The mother is not able to masticate her food properly and imperfect digestion follows; defective nutrition is the result and its influence is manifest in the formation of the infant's teeth. Almost as certainly as the parent's teeth are defective, the child's will be also.

Prof. E. T. Darby, of Philadelphia, read a splendid paper on this subject before the Odontological Society in 1883. His estimate of the value of these organs is very beautifully stated. I regret that for want of space I cannot reproduce the article entire, but have to confine myself to a few brief extracts. I would, however, recommend that every earnest member of the profession give the article a careful re-reading.

I must, however, take exception to some of the principles laid down by Dr. Darby. He says :

“ When the incisors are found slightly decayed, my practice has been to file them largely asunder and afterwards polish the proximal surfaces with emery strips and oxide of tin. The same practice may be used to advantage on the proximal surfaces of the molars. If caries has penetrated the dentine and is too extensive to warrant removal, fill with gutta-percha, or, what I consider superior, some of the better preparations of phosphate of zinc.

It frequently happens that the pulps are found exposed in the temporary molars. When such is the case I devitalize them at once, not by the use of arsenic, but with carbolic acid and cantharides. My method is to moisten a small pellet of cotton with carbolic acid, and then apply to its under surface a little powdered cantharides. One or two applications is usually sufficient to devitalize the pulp in a temporary tooth. When the pulp is found to be painless it is removed from the pulp chamber, and as thoroughly as convenient from the canals; a disk of thin platinum is then fitted over the opening leading from the cavity of decay into the pulp chamber. To hold this disk in position a little gutta-percha or gum damar is placed upon its under surface; the whole is then warmed in a spirit lamp and tacked in position in the cavity. The cavity of decay is then filled with amalgam or phosphate of zinc, as may be thought preferable. After this has been done, a small “tap-hole” is made with a small drill upon the buccal surface at the free margin of the gums, to allow the egress of any gases which may arise from the non-removal of any portion of the pulp. While I would condemn as heartily as any one present a similar treatment for permanent molars, I am convinced after many years of such treatment, that it is the best known for temporary teeth. It prevents the probability of subsequent pain and the too frequent result of abscesses. You will all bear me witness that a devitalized pulp in a temporary tooth means a subsequent abscess if this precaution of drilling is not observed, and many nights of suffering are spared the little patient if this practice is followed.

"There is another operation upon the temporary molars which is too frequently overlooked, but the importance of which cannot be overestimated. I allude to the free cutting of the distal surface of the second molar upon the appearance of the first permanent, or sixth year molar. When this operation is neglected the mesial surface of the permanent molar is usually the seat of caries. As soon as the sixth year molar has taken its position alongside of the second temporary molar, I cut away largely with a disk from its distal face, thus preventing three or four years of contact which at this period of life is so fatal in its results. * * *

"I have never been of the opinion that the premature loss of the temporary set has exerted a marked effect upon the position of the permanent ones in the matter of irregularity, but there is one mistake which dentists so frequently make that I believe it worthy of our consideration for a moment. I refer to the early removal of the temporary cuspids to make room for the permanent laterals. In my judgment a greater mistake cannot be made; and yet it is one which almost daily occurs. What is the result? The first permanent bicuspid, which precedes the permanent cuspids by several years, takes its position by the side of the permanent lateral, and no room is left for the cuspids. The choice then to make room for the coming tooth lies between the expansion or enlargement of the jaw, or the removal of the first bicuspid. To accomplish the first is usually an undertaking of no small moment; to resort to the other not infrequently gives, as the result, a deformity which is as apparent as it is unnecessary. Allow the cuspids to remain, and trust to the rapid enlargement of the arch between the eighth and twelfth year to make room for the laterals."

I was surprised, grieved, and pained beyond expression, that any one holding the exalted position of Dr. Darby, should give endorsement to any such fallacious practice as that of Dr. R. Arthur, endorsed by a few other old fogies, who boast that they have been bungling along for over a quarter of a century, and have not the perception to see that they have been doing

wrong all that time. The cases where it would be admissible to cut the proximal surfaces of teeth (deciduous or permanent) are very rare indeed. Where they are spaced apart and have shallow surface decay and rough, thin enamel edges, it would be admissible, but then they rarely need it.

To cut away any tooth, or teeth, so as to throw their cervical margins in contact, I must ever protest against, and make war upon such teachers and teachings, wherever found.

My method of treating proximal decays is to space the teeth apart considerably with cotton, wedging them twenty-four to forty-eight hours, and then contour them boldly, bracing the teeth firmly against one another, and if possible increasing the size of the arch, and bridging the amalgam or filling used across from one to another, almost amounting to bridgework, with amalgam, going thus to the other extreme of that heroic cutting recommended by Dr. Darby. Teeth that are alive I have no solicitation about. They are cast out in nature's own time and in her own way, as the leaves drop from the trees in autumn.

In my early practice, I used to pride myself on being very handy with forceps to aid nature in getting rid of deciduous teeth or roots, and conscientiously thought I was doing my patients good, by cleaning up their mouths in such a manner as to have them look clean at least, when in reality I was doing them irreparable injury. I can now look over a set of teeth where the remains of the old ones are sandwiched between the new, and know that I am doing my patient a great benefit by leaving all of these unsightly looking pieces in the jaw, but I grind them smooth with corundrum wheels, removing the sharp points and shorten them down sufficiently to prevent contact with the teeth of the occluding jaw.

I have seen many cases of locking of the crown of the second bicuspid where the premature extraction of a premolar, or the heroic distal cutting, has allowed the sixth year molar to tip forward, locking the bicuspid, and many times throwing it out of line, and having a marked effect toward irregularity of the permanent teeth.

Where the pulps are dead, I fill the root canals as perfectly as possible with chloro-percha, and restore the crown to a bold contour, and when the patient has arrived at the age when a permanent tooth should succeed this one, knowing that the dead roots of deciduous teeth are not resorbed, I grind the top of the crown away, to allow it to be thrust forward by the advancing new tooth. Many times I split the crowns with excising forceps through the line of the division of the roots, so they can take their natural position relative to the new crown, making and retaining plenty of space between these pieces and their occluding fellows, and from time to time, as these pieces come up, I grind away again. I allow the roots to remain between the advancing crowns, in many instances leaving them until the patient is fifteen years old, or until I am thoroughly satisfied that the growth of the jaw is sufficient to accommodate all the crowns of the second set.

I regard every deciduous tooth equally as important in its sphere as any of the permanent ones are in theirs. They perform the high mission of masticating the food that is to build up the permanent ones, and it is through their perfection that the greatest degree of excellence is attained in the permanent ones.

It is an exceptional case where I extract deciduous teeth or roots. We might learn a very important lesson by watching the process of teething in domestic animals, where the process is beautifully accomplished without dental assistance.

PERSONAL HABITS OF DENTISTS.

BY THEODORE LEDYARD, M. D., NEW ROCHELLE, N. Y.

Now and then we read in different journals short articles or hints bearing on personal habits of dentists.

There is no doubt that this sort of thing in a dental journal may often cause a sneer.

Appreciating the fact that "preaching temperance" and similar subjects do little good, still it does no harm, and is never amiss.

No dentist needs to be taught that the use of liquors, tobacco and such savory articles of diet as onions, cabbage, garlics, etc., causes odors which, to say the least, are very offensive to patients. We all know this without being taught, but if we are using any of these from habit, our senses become dull, and thus we soon forget how offensive we may become. And so, if our attention is called occasionally to the subject of personal habits, it can do no harm.

If we were situated so that we transacted business with men only, and perhaps with a pane of glass intervening, as cashiers or others, we might be careless in this respect, and go undetected. But this is not the case with dentists. Most of our patients are children and ladies, and it is most certainly due them that we pay strict regard to our personal habits.

Some dentists are troubled with foul breath arising from the stomach; and it is a fact that this very neglect to correct an evil is sufficient to cause a certain loss of practice.

Perhaps none suffer more from offensive odors by the breath than dentists, but that is our lot, and we are supposed to get used to it, or rather, not to mind it. Not so with our patients, who often notice irregularities quickly, and even sometimes have excessively sensitive olfactory nerves. An appreciation on our part of these things leads to our pecuniary good.

SOLID CHUNKS OF COMFORT.

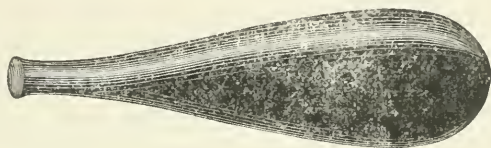
BY E. C. MOORE, M. D., DETROIT, MICH.

In those trying moments when a tooth is being filled with gold, and periodontal inflammation has arisen from long continued malleting or other causes, rendering a proper continuation of the operation exceedingly painful to the patient, if not impossible for the operator, "Solid Chunks of Comfort" will be found invaluable.

"Chuck" a piece of wood in an ordinary dental lathe, and turn a model twice the dimensions of accompanying cut. Mould in sand and cast in lead. When finished cover the body with

kid, if desirable, and slightly concave the small end. The latter, moreover, can be easily shaped and bent so as to fulfil every immediate demand.

This instrument or tool should be held in the left hand of the operator or by an assistant, with the small end resting, without pressure, against the partially filled tooth, in such direction as to receive the force of the blow.



CUT ONE-HALF ACTUAL SIZE.

When once tried, on demand, the operator will soon find to his joy that the name I have chosen for it is not an inappropriate one; for in all cases, and especially those where the consolidating force is necessarily at right angles with the axis of the tooth, it will be a wonder how it was previously possible to do without it.

THE STRUCTURE OF TEETH.—I am convinced that the dental fibres are true processes from the odontoblasts, and that the processes from the deeper cells do not enter the dental canals. I further believe that these odontoblasts are concerned, as stated before, in the formation of the dental matrix; and that they are capable of transmitting nerve impulses. These odontoblasts are in direct union, or contact, with nerve fibrils. The odontoblasts, with their processes—the dental fibres—are therefore, physiologically speaking, the endings of the dental nerves. The dental fibres are processes of the odontoblasts—Klein notwithstanding; the dental canals contain only their lining membrane, and the processes from the odontoblasts. These processes do not quite fill the canals; there is room for a flow of lymph around them, corresponding in this regard to the lymph, canalicular system of cartilage and bone.—C. H. Stowell, M. D., in the *Microscope*.

TRANSLATIONS.

FORMATION OF TARTAR ON THE TEETH.

TRANSLATED BY H. MUETZE.

Mr. Gallipe says that, according to his experience, based upon numerous clinical observations, the precipitation of earthy salts of the saliva is the work of micro-organisms, which the latter contains. Salivary calculus therefore is a living substance, and the germs which it contains are not accidentally enclosed in it. They preserve their vitality for months and Mr. Malassez as well as Mr. Vignal have studied and cultivated them. Taking these views the author brings forward the idea that salivary calculi might have an origin analogous to that of dental tartar. The greater part of these calculi have in the center a peculiar, foreign body, which would act as a parasite carrier. If once introduced into the canal, the parasites act on the saliva in the same manner in which they do in the mouth. Therefore a calculus varies according to the gland. Furthermore, experience allows us to state that all these calculi contain parasites, which are susceptible of being disseminated and cultivated.

Taking these facts as a basis Mr. Gallipe has asked the question whether this way of viewing the formation of calculi wouldn't throw more light on the pathology of other calcarious formations of the human system. In fact, the author thinks that so far, we have had to be satisfied with the defective theories concerning the mode of formation of biliary and urinary calculi.

We know that a certain number of parasites exert marked chemical actions; some combine nitrogen, others oxidize ammonia and form nitrates. Inversely there are some which re-

duce the nitrates and sulphates and liberate the elementary bodies. We may therefore admit that the micro-organisms, finding in the physiological and pathological changes, organic liquids which favor their development, are able to effect their respective chemical action in these liquids and cause the precipitation of substances, which are soluble in a normal state. In order to make this theory acceptable, it was necessary to demonstrate the presence of parasites in calcarious concretions, such as biliary calculi. The author has proven it; for there are parasites in biliary and urinary calculi of different description, including even those of crystallized cystin.—*Le Progrès Dentaire*.

DEGLUTITION OF ARTIFICIAL TEETH.

TRANSLATED BY H. MUETZE.

There is an old story circulating according to which an elderly gentleman happened to swallow his plate. In consequence of this he suffered such a terrible pain in the stomach that he could not help grinding the rest of his teeth pretty closely to the nose of the apothecary, who came there to relieve him. The brave man was so frightened by this unexpected grimace, that he speedily took to flight.

A similar, yet fatal case, occurred in Paris not long ago. A young girl, Marie Haretens, 22 years of age, was suddenly taken ill. She complained of a terrible pain in the stomach and was therefore sent to the hospital. In spite of all the good care, however, which she received, she grew worse every day and the attending physicians could not explain the nature of the disease. At first they supposed it to be a case of poisoning, but the patient, on being questioned, said she didn't know anything.

One evening, however, when she felt she was growing very weak, she confessed to the superintendent of the hospital that she had been wearing a plate and swallowed it while asleep. The next day she died. The post-mortem examination proved

the truth of her confession. The plate was found in the stomach where it had produced a severe inflammation, causing the death of the girl.—*Le Progrès Dentaire*.

WHAT WILL BECOME OF OUR TEETH AND HAIR IN FUTURE TIMES.

TRANSLATED BY H. MEUTZE.

According to Messrs. Laton and Hammond the future of these two organic productions is expressed by only a very few words: "There will not be any more." This sad event will overcome us sooner or later, but it is supposed that about the year 3500 all our descendants will be smooth as eggs and toothless as chickens. Those two American authors, who originated this idea, claim that baldness and absence of teeth are natural companions of a higher grade of civilization and the more we advance in this, the less use we shall have for hair and teeth, which are attributes of animality. The cause of this perfection (?) must be sought in our habit of covering the head and cooking our food. Therefore about the year 3500 only the savages—if there are any yet—will be able to boast of a hairy tegument —*Le Progrès Dentaire*.

IODOL A SUBSTITUTE FOR IODOFORM.

TRANSLATED BY H. MUETZE.

The general application of iodoform has so far been greatly hindered by its intense odor and its toxical action. All remedies, recommended for its deodorisation, have seldom had the desired effect.

Iodol was first prepared by Drs. Ciamician and Silber in Rome and applied and examined at Mazzoni's Surgical Clinic. It proved to be free of odor and toxical action. It is manufactured in large quantities by Kalle & Co., in Biebrich. It

has been used in the surgical clinics of Berlin and Heidelberg with the very best results, and it required less of it than of iodoform, to have the desired effect.

For injection in cases of abscess, idol-alcohol (1:16) and idol-glycerine (1:34) was employed.

For filling tooth-canals it has been used by Dr. F. A. Henrick in the form of powder or mixed with glycerine as a paste. It proved very useful in the replantation of upper incisors.

Further communication on the application of idol, will certainly be of great interest to the dental profession.—*Vierteljahrschrift*.

IODOL—A SUBSTITUTE FOR IODOFORM.—To the progress of synthetical chemistry we owe an addition to our present list of local antiseptics, which, if on further trial it be found to bear out the promises made for it by its discoverers, bids fair to take the place of iodoform altogether. Iodol, the substance referred to, is a dark powder obtained from "Dippel's animal oil." It has but little smell, and is soluble in three parts of absolute alcohol, but only in 5,000 parts of water. More than two hundred observations on various diseases have been made with it in the Royal Surgical Institute in Rome. It was used in substance, suspended in glycerine, dissolved in alcohol with glycerine, and as ointment.—*Medical Record*.

TEMPERING SWISS BROACHES.—Divide the number of broaches into halves, then place together again, leaving half and half pointing in opposite directions; bind together with binding wire, drop melted beeswax over the bunch until the broaches are covered with the wax, then hold in a blaze until the wax ignites, remove from the blaze and allow the wax to burn off; let cool gradually. By this process the broaches are nicely tempered without corroding their surfaces; they are flexible yet sufficiently stiff not to bend too easily. HARPER.

EDITORIAL.

A NOTABLE MEETING OF THE NEW YORK ODONTOLOGICAL SOCIETY.

The April (1887) meeting of the New York Odontological Society was an exceptionably notable meeting of a deservedly notable society. It was not notable in any specially marked sense in the point of large numbers being present, although quite a list of invitations was extended to non-members in and outside of the city. Neither was it specially notable in point of hospitality extended to the guests on this occasion. The hospitality was characteristic of the society. Those who have on so many other occasions been the recipients of the hospitality extended by the New York Odontological Society will understand the term used. When we received our invitation from a committee of its members to "take dinner with them at the Hotel Brunswick," we expected a good dinner and a warm cordial reception, and we were not disappointed.

But that which made this meeting a notable one was the paper that was read, following the dinner, at the Hall of the Academy of Medicine. It was by Dr. I. B. Davenport, of Paris, and was read by the society's President, Dr. E. A. Bogue. The subject being, "The Significance of the Natural Form and Arrangement of the Dental Arches of Man, with a Consideration of the Changes Which Occur as a Result of Their Artificial Derangement by Filing, or by the Extraction of Teeth." To say that this paper is a most notable contribution to dental science is certainly not an extravagant statement. It is one that is to be a landmark in the history of dentistry; and as a scientific production would be an honor to any profession or branch of science. It is the result of an

immense amount of study and observation in an heretofore almost unexplored field; and the fact that Dr. Davenport sent it across the water, choosing the New York Odontological Society as the medium through which it shall be presented to the profession at large, is not only a significant recognition of, and compliment to, a most worthy society, but of the profession in America as well.

It is utterly impossible for us to give even a synopsis of the paper, for it is a most elaborate treatise of the subject, nearly every point of which is illustrated by charts and models of actual cases. These alone would constitute an exceedingly interesting and instructive study, and to eliminate them or attempt to make a synopsis of the paper without them, would be like an effort to illustrate a human body leaving out the bony structure. In fact, the paper *per se* is little other than an attempt to elucidate this elaborate record of facts and discover the forces, laws and functions that underlie the treatment or "derangement" of dental arches "by filing and extraction of teeth." It will soon be published in the *Cosmos*; but if the profession give the matter as much study and thought as has the author, *discussion* will not follow all along the line until somewhat later.

It is evidently perfectly safe to state that no such effort has heretofore been made to accurately formulate the laws or conditions upon which treatment in such cases should be based. It is an effort to determine and exhibit in a strictly scientific manner the exact forces that invariably tend to produce certain results.

The author of the paper concludes that the natural forms of the dental arches and of each component tooth in them, when in normal condition, is the form best calculated to preserve its integrity in the greatest perfection and for the longest period. When abnormality of form or position exists, the question naturally arises, how can the nearest approach to normality be secured at the least cost of structure, time and pain. As resection of considerable portions of the teeth forms a prominent part of the ordinary practice, the effect of this treatment

after a lapse of eight or ten years is considered. And the fact that changes are constantly taking place in the positions of the teeth, and that changes in one portion bring about changes in another, is carefully noted and illustrated with the results of these changes.

At the conclusion of the reading some two hours were spent, not in discussing the paper, for few were ready for that, but in expressing appreciation and commendation. This was universal whatever the disagreements might be as to minor points of conclusion. The members of the society, however, generally postponed their remarks until the next month's meeting, thus courteously affording the visiting dentists an opportunity on this occasion.

That the paper will be discussed in the future we have no doubt at all, for, as remarked above, we regard it as a paper that is sure to constitute a landmark in the history of dentistry. There will, undoubtedly, be no lack of dissent and disagreement on the part of many who have become wedded to the practice of "oral gardening;" but that it is to be the means of bringing about a revolution in the practice of a large number in the profession, and that it will lead to a more general and intelligent apprehension of the forces that underlie the treatment of these cases, and, therefore, render treatment far more scientific than has been the case heretofore there can be little room to doubt.

C. T. S.

WISCONSIN'S AMENDED DENTAL LAW.

The following substitute for Section 6 of the original dental law of Wisconsin has just been signed by the Governor. It reads:

"Any person who shall violate any of the provisions of this Act, or who shall pursue or practice dentistry in this State without having annually registered, or who shall pursue or practice dentistry in this State without having a license therefor, as herein provided, or who having such license, shall fail

or neglect to annually register, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined not less than ten dollars and not more than one hundred dollars for each and every offense. And each patient treated and each operation performed shall be deemed a separate offense under this Act; and each registration shall expire on the 30th day of September of each year.

Providing that nothing in this act shall prohibit or prevent physicians in regular practice from extracting teeth."

The important change sought by this amendment was to have the penalty for its violation placed low enough to permit of Justice Courts imposing the fine in place of the tedious and expensive proceedings before the Circuit Court.

The wording was also intended to make plain any duties and liabilities under the law, and we feel quite certain this too has been accomplished, and as now constructed is as good, both in plan and substance as any State can boast of.

E. P.

"CAN HUMAN BONE BE TOLD FROM OTHER BONE BY AID OF THE MICROSCOPE?"

Students and others interested in histology will be gratified in receiving an answer from one who is authority in histology.

C. H. Stowell, M. D., F. R. M. S., Professor of Histology and Microscopical Technology, University of Michigan, recently was called upon as an expert witness to answer the above question, in a trial for murder. He says:

"Practical experience had shown me that there was a difference between the compact bones of man and many of the lower animals. What was this difference? Was it definite enough to enable one to put himself on record as to just wherein this difference consisted? In the case of the compact bones of the ox, for instance, the lacunæ appear smaller, and the number of Haversian canals with their system of lamellæ, more numerous than in man; but how accurate would this test be if certain compact bones from man were compared

with certain less compact bones from the ox? And how general could such a test be made in the case of many other animals?

As a result of some labor in this line I was obliged to testify substantially as follows: If the question were between a certain known bone from man and a certain known bone from the ox or from any of the lower animals, I believe the microscope would enable us, many times, to decide to which animal the bone belonged, even when we were in the possession of a comparatively small piece.

In answer, however, to the very general question at the head of this article a general negative must be given?"—*The Microscope*.

THE MICHIGAN STATE DENTAL SOCIETY.

The Michigan State Dental Society convened at Ann Arbor, Tuesday, March 22, and adjourned the following Thursday, one day earlier than was expected.

Dr. Land's paper, or lecture, upon "Porcelain Restoration of Decayed and Broken-Down Teeth," together with his models, charts and clinics was the practical feature of the meeting.

Prof. Vaughn, of the Medical Department, gave an instructive paper on Salivary Analysis. In a subsequent discussion relative to the anæsthetic action of nitrous oxide gas, he gave it as his opinion that it entered the blood as a definite, though somewhat unstable compound; that doubtless the blood was surcharged by it; and that instead of oxyhæmoglobin, as in ordinary breathing, nitro-oxyhæmoglobin was produced.

Dr. Harroun, of Toledo, read an interesting paper upon a method of operating for congenital cleft-palate and lip, showing photographs of a remarkable restoration which he had produced. He also performed an operation, in clinic, of transplanting a central incisor in a partially-filled socket from which the native tooth had been removed several weeks.

Prof. Watling—in lieu of a paper and models which he unfortunately left at home—introduced that much discussed and

mooted question: "First Permanent Molars--What shall we do with Them?" He took the position which, numerically speaking, is the weak side, but one that is in accord with the belief of many leading dentists of to day, *i. e.*, when the first molars are found to be badly decayed during the ages of seven to ten years, with every indication that renders the ultimate saving of them improbable, they should be removed in time to allow the second molars to take their place.

The adherents of this view do not believe in the wholesale extraction of these teeth, nor are they unmindful of the fact that no law can be invariably followed; but that in each individual case every influencing circumstance should be carefully weighed and a mode of procedure adopted that will result in the best future good to the patient. In regard to a subject of such vast importance and difference of opinion, we would respectfully suggest that the entire dental profession adopt some method by which data can be procured that will put the question upon a scientific basis.

Dr. Dorrence was, as usual, riding his last hobby—He did not say modeling compound was better than plaster for impressions, but the burden of his argument was in that direction and, when criticised sharply by the brethren, he gracefully retired back to plaster.

Our friend, the venerable and much respected "Jerry" Robinson, was elected President for the ensuing year, and with his usual happy felicity brought the meeting to a close. X.

A SAD CASE.

A short correspondence appears in this number signed F. K. Lambert, D. D. S., formerly of Auckland, New Zealand. There is a sad history connected with this short sketch, or rather the author of it. Dr. Lambert is suffering with cancer of the bowels. He was treated in the Auckland Hospital; after two years suffering he was pronounced incurable and advised to go to his mother in Fulton, N. Y. He was without means but kind friends started him on his journey. He left Auckland Jan-

uary 30, and arrived at San Francisco February 22, where he was compelled to remain for three weeks, being too ill to travel. A ladies' benevolent association rendered him as comfortable as possible, and a purse raised sufficient to enable him to reach St. Louis, but he had to lie over in Denver three days to recruit. In Denver the dentists aided him. He arrived in St. Louis on April 4, but was unable to get out to see any one until the 9th, when he made his wants known. His case was such a worthy one that a hat was passed around among the dentists and sufficient funds placed in his hands to enable him to complete his sad and painful journey. He left St. Louis on April 11, rejoicing that he would be with his mother and sister the following day. The sadness of the case is still augmented by the condition of his sister who is subject to "fits," from overstudy; the "fits" occurring, at last accounts, as often as four times a day. The unfortunate gentleman promised to let us hear from him, and if further assistance is needed, it will no doubt be furnished. He is a perfect gentleman, and the extent of his misery had to be drawn out by questioning, his modesty preventing him from stating his condition in as dark a light as was warranted by the facts.

The *American Practitioner and News* has adopted the following quotation from Ruskin as a heading for his columns of Original Articles. It coencides so well and expresses so admirably our views that we feel justified in adopting it as our motto for the ARCHIVES. We trust the editor of the *Practitioner* will not object to our following the example set us. Correspondents will read, mark, learn and govern themselves accordingly :

CERTAINLY IT IS EXCELLENT DISCIPLINE FOR AN AUTHOR TO FEEL THAT HE MUST SAY ALL HE HAS TO SAY IN THE FEWEST POSSIBLE WORDS, OR HIS READER IS SURE TO SKIP THEM ; AND IN THE PLAINEST POSSIBLE WORDS, OR HIS READER WILL CERTAINLY MISUNDERSTAND THEM. GENERALLY, ALSO, A DOWNRIGHT FACT MAY BE TOLD IN A PLAIN WAY ; AND WE WANT DOWNRIGHT FACTS AT PRESENT MORE THAN ANYTHING ELSE.—*Ruskin*

"SEND THEM ALONG."

So says the *Western Dental Journal* in its publisher's column for April, and under this caption the publisher expresses himself as follows: "The fact that one or two of our contemporaries have expressed a determination to not publish proceedings of society meetings constrains us to say that the *Western Dental Journal* is printed for the benefit of 'the dentists now on earth,' and if any society, especially those of the *West*,¹ desire their proceedings published * * * our pages are at their disposal."

How about notice of meetings? especially that of the Missouri State Dental Association, which we have been informed, was sent to the journal with request to publish. We notice an editorial in the April issue under the title, "The State Meetings," in which the reader's attention is called to the coming meetings of the Kansas, Iowa, Nebraska, Illinois, and Texas State Associations. Notices of these meetings also appear under *Society Notes* in the same issue, but we look in vain for a word in regard to the coming meeting of the Missouri State Association, which is to be held on the third Tuesday in June, 21 to 24 inclusive, in Kansas City, where the *Western Dental Journal* is published. The editor of the *Journal* is also one of the executive committee, and yet he and his journal completely ignore this association. "We are constrained" to ask why is this thus: Poor old Missouri! The *Western Dental Journal* does not seem to recognize you as one of the societies "especially of the *West*"¹ to whom its pages are open.

As we have before stated, we do not propose to publish the usual reports of dental meetings, but our pages are at the disposal of any dental society, East or West, North or South, who may desire to publish notice of meetings, not excepting the Missouri State Dental Association. "Send them along."

¹Italics are ours.

CORRESPONDENCE.

EXTRACTS FROM A PERSONAL LETTER FROM NICE.

I won the heart of an English Major-General by curing up some abscessed teeth for himself and wife, which they seemed to think quite wonderful. The facts are these: Over here it is all tooth stuffing and extracting, making plates, etc., and the dentist seems to be (and justly too) put on an equality with the barber, and I think just where he belongs, for it is simply disgusting to see the style of operations, and the number of teeth going to destruction for want of intelligent treatment. The people are entirely ignorant of what they have a right to expect and demand; to treat a tooth *a la* Atkinson, as we have been taught, they become alarmed, and one of my cases in Paris was alarmed and rushed off to see her *Medico* to ask if she was being properly treated, when lo, and behold! he made some unwise suggestions and criticized my course of treatment. I, of course, sent a reply, asking him certain questions as to the action of certain medicines upon inflamed tissue, etc., and stated that he had better become acquainted with the subject before offering advice to an American dentist, who was practicing American dentistry (not French). But it's just this way, first of all one must master the French language so as to be able to fully explain, so they can judge for themselves. I have found those who understood English always willing to trust you, and want your best services, but our dentists will assert, "Oh no! it will drive them away, they will never submit to a long operation, etc.," which is all stuff, for I have been here long enough to judge for myself.

I now hope to see you all in New York in the near future and settle down, to wander in strange lands no more, feeling

satisfied that our people of the United States are the best in the world. Were I twenty-five years younger, I should make my stand in Paris, where, I feel tolerably certain, a golden harvest would reward me financially, and a clean conscientiousness of having served my fellow man faithfully would bring its own reward.

AMERICAN DENTISTRY IN THE ANTIPODES.

ST. LOUIS, MO., April 9, 1887.

EDITOR ARCHIVES.—A short sketch of what has been done and the grit shown by American dentists in Sydney, Australia, may not be uninteresting to some of your readers.

About four years ago a sum equal to \$1,000,000, (one million dollars) was left by Mr. J. H. Fairfax to found a Technical College, provided the government gave a similar amount; the amount was given and the college built. Dr. Slate and Dr. Symes, D. D. S.'s of this country, thought that a good opportunity had arrived to open a school of Mechanical Dentistry, a school of Dental Surgery having already been established at the Sydney University through the medium of these gentlemen.

Striking while the iron was hot, Dr. Slate had the pleasure of knowing that his proposals met with approbation, and the class was established, and now some twenty five or thirty young men are being taught mechanical dentistry as well as the usual curriculum of university studies necessary to qualify them for the degree of D. D. S.

Dr. Slate and Dr. Symes are not by any means the only ones who have advanced American dentistry in the Antipodes. Dr. Lovell, Dr. O'Neill and Dr. Leonard, of Melbourne, Dr. Hubert Norman, of Adelaide, South Australia, have one and all shown by their energy and push that dentistry in this country means something more than merely drawing a tooth. They have shown that in the majority of cases a decayed tooth does not mean that it is lost forever, but by the process of filling, teeth which a few years ago would have been ruthlessly torn from

their beds, as of no further use, are now made "as good as gold" can make them. Yours, F. K. LAMBERT, D. D. S.

FIVE DAYS SHALT THOU LABOR.

Boston, March 10, 1887.

EDITOR ARCHIVES:—In the February number I read with interest, under "Ask and Ye Shall Receive," the suggestion that it would be well for dentists to tell how they arrange their work so as to enjoy their life.

For my part I have solved the problem by writing a new commandment. Why should Moses have been granted a monopoly of this kind of literature? You will remember that one of his original ten said: Six days shalt thou labor and do all thy work, or something to this effect. I have changed all that, and my commandment is: Five days shalt thou labor and the sixth day ride a hobby in the open air.

It is impossible to limit one's working hours in full practice; people will come and must be attended to; but by getting one free day and disappearing where they cannot reach you, you are secure for that day at least.

This one free day in the working week—taken together with only nine months' work, the other three being spent at high elevations out of door—will do more than any other system that I have tried and, in my case, is enough to make me enjoy my work.

Yours, sincerely,

230 Marlborough St.

WILLIAM HERBERT ROLLINS.

UNIFORMITY OF DEATH-RATES.—Dr. Oliver Wendell Holmes says: "The art of the physician can do much to remove its subjects from deadly and dangerous influences, and something to control or arrest the effects of these influences. But look at the records of the life insurance offices, and see how uniform is the action of nature's destroying agencies. Look at the annual reports of the deaths in any of our large cities, and see how their regularity approaches the uniformity of the tides, and their variations keep pace with those of the season.

SOCIETIES.

ST. LOUIS DENTAL SOCIETY.

This veteran society held its regular monthly meeting at the office of Dr. Wick on Tuesday, April 5, 1887.

There was a goodly number of members present, and peace and harmony prevailed. This is a noticeable feature in a gathering of dentists at the present day—when wars and rumors of wars are so prevalent in other sections of the dental world. There seems to be some subtle influence in the air of a dental society provocative of strife and discord.

St. Louis has been affected by it occasionally in the past, but to-day everything is lovely, the bones of contention are buried, we hope never to be unearthed. Honors are easy, and we all stand pat, taking all the chances of being raised out of our sockets by those around us who are always on the draw.

The St. Louis Dental Society is one of the oldest dental organizations in this country. She was born in St. Louis December, 1856, when her eldest sister, the Mississippi Valley Dental Association, was twelve years of age, and her next youngest sister, the Western Dental Society, was but two years old. These sister organizations were the first of their kind in this great Mississippi Valley.

When young and full of the life and vigor of youth this society did a noble work and achieved an enviable reputation, at home and abroad, as a dental educator. Its light was never obscured, but like the electric beacon that illuminates the pathway of the befogged mariner, its rays dispelled the dark shadows along the pathway of many a benighted traveler on the highway to dental fame. It was organized by a band of honest, earnest and faithful workers, who were ever ready to

respond to roll-call. Of these old soldiers but one—Dr. C. W. Spalding—is left, and he has laid aside the armor of dentistry, the forceps and plugger, donned the miner's out-fit and taken up the pick and shovel. Has ceased looking down in the mouth and is now looking down into the mine for the shekels to add to those gathered from the practice of dentistry.

The present members of the society are younger men, who, as a class, perhaps, are better versed in the theory and science of dentistry than were these fathers, but they seem to be wanting in that energy, zeal and push which characterized their seniors, and which gave to the society and the profession of St. Louis such a world-wide reputation as operators. For the past two years or more this society has been afflicted with some peculiar malady which has nearly proved fatal. She has lain in a comatose condition most of the time with but an occasional return to consciousness.

At this monthly meeting there were hopeful indications; a return to consciousness and other signs of convalescence which have not been present of late.

Taking these favorable symptoms as a basis, we are of the opinion that with a proper course of treatment, care of diet, and drink, and good careful nursing we may look for a speedy recovery.

Among the noticeable features of this meeting was the presentation of a case of Replantation, by Dr. McNamara; a superior central incisor removed on account of a persistent alveolar abscess, and replanted successfully eighteen months since. The tooth was firm, and the surrounding parts appeared to be in a perfectly normal condition.

A case of Irregularity was presented by Dr. Wick. A superior cuspid within the arch, regulated by the use of a rubber plate and a jackscrew.

Dr. Eames exhibited a copy of Dr. Stowell's "Microscopic Structure of a Human Tooth." He called the attention of those present to the artistic neatness of the work, both on the part of the artist and engraver. Said it should find a place in the reception room of every well furnished dental office.

After adjournment the society repaired to the dining room and partook of an elegant repast. One of the hopeful signs of convalescence was the apparent relish and zeal with which the members entered upon this last bit of the evening's work.

SCRIBE.

KENTUCKY STATE DENTAL ASSOCIATION.

The Kentucky State Dental Association will hold its Seventeenth Annual Meeting at Louisville, Ky., beginning Tuesday, June 7, 1887, and continuing three days. The meeting will be held in the Louisville College of Dentistry.

Address of the President by J. T. McMillan, D. D. S.

The subjects for discussion are—The Proper Care of Children's Teeth. The Consistent Saving of Time in Prolonged Operations—How can it Best be Accomplished? The Causes of Dental Caries, and the Best Preventive Treatment. The Proper Treatment of Pulpless Teeth. Crown and Bridge Work. New Remedies. Incidents of Office Practice. Members are requested to prepare papers on above subjects.

The following papers will be read: Cancrum, or Scirrhus Gangrenosa of the Inferior Maxillary, J. T. McMillan, D. D. S., Paris, Ky. First Dentition' F. Peabody, D. D. S., Louisville. Disease, J. Taft, D. D. S., Cincinnati. Irregularities, G. W. Keely, D. D. S., Oxford, Ohio. The Rationale of Crown and so-called Bridge Work, John J. R. Patrick, D. D. S., Belleville, Ills. Inflammation, H. D. Eggers, M. D., D. S., Louisville.

The clinics will be as follows: Gold Crown and Bridge Work, Jno. H. Baldwin, D. D. S., Louisville. Impressions, B. Oscar Doyle, D. D. S., Louisville. Microscopy, Simon Flexner, Ph. G., assisted by J. Hooper, Louisville. Porcelain Crown, F. Peabody, D. D. S., Louisville. Gold Crown with Porcelain Face, C. G. Edwards, D. D. S. Louisville. Irregularity Appliances, G. W. Keely, D. D. S., Oxford, Ohio. Bridge Work, Jno. J. R. Patrick, D. D. S., Belleville, Ills. New Appliances, T. A. Long, Philadelphia.

Voluntary papers.—Conceited Dentists, H. D. Eggers, M. D., D. D. S., Louisville. Irregularities, W. P. McQuown, Georgetown, Ky. Crown and Bridge Work, J. Hooper, Louisville.

The officers are, President, J. T. McMillan, D. D. S., Paris. Vice-President, W. S. Smith, Newcastle. Treasurer, J. F. Canine, D. D. S., Louisville. Secretary, Chas. E. Dunn, D. D. S., Louisville.

The State Board of Examiners will meet daily during the session to register and examine applicants.

The S. S. White Dental Manufacturing Company have kindly consented to make a display of goods manufactured by them, which will be in charge of Mr. T. A. Long, who says, in a recent letter: "You can say to the country dentists that they will see everything in the line of improvement up to the very latest thing pertaining to their profession." The display will be in the College Building.

Members of the Dental Profession at large are cordially invited to attend, and unite with us in making the meeting one of great profit.

Reduced rates have been arranged for at the following hotels: Louisville Hotel, \$2.50 per day; Fifth Avenue, \$1.50 for two in a room, or \$1.75 for one in a room, per day; St. Cloud Hotel, \$1.50 per day; Alexander, \$2.00 per day.

For further information address the Secretary,

CHAS. E. DUNN, D. D. S.,
No. 529 Second Street, Louisville, Ky.

CHICAGO DENTAL SOCIETY.

April 13, 1887.

EDITOR ARCHIVES.—Dear Sir. At the annual meeting of the Chicago Dental Society, held Tuesday evening, April 5, the following officers were elected for the ensuing year:

President, Dr. J. G. Reid; First Vice-President, Dr. J. A. Swasey; Second Vice-President, Dr. G. H. Bentley; Recording

Secretary, Dr. G. N. Johnson; Corresponding Secretary, Dr. W. B. Ames; Treasurer, Dr. E. D. Swain; Librarian, Dr. A. W. Harlan; Board of Directors, Drs. G. H. Cushing, E. Noyes and J. A. Swasey; Board of Censors, Drs. B. L. Rhein, J. W. Wasall and L. L. Davis. W. B. Ames, Cor. Sec'y., per W.

SOUTHERN ILLINOIS DENTAL SOCIETY—FIRST ANNUAL MEETING.¹

The First Annual Meeting of this society was held on April 12, and 13, at Du Quoin, Ills.

The programme, embracing essays and clinics, was quite lengthy, and was carried out without a break.

Dr. Chas. R. E. Koch, of Chicago, gave a public address on Tuesday evening to a delighted audience; subject, "Dentistry Past and Present." Clinics were given by Drs. Koch and Ottofy, of Chicago, Dr. Morrison, of St. Louis. Dr. Penny, of Chester, demonstrated the application of electricity for painless dental operations.

Dr. Prichett; "The Use of the Herbst Method in Filling Teeth with Amalgam. Dr. Geo. A. McMillen; Method of Constructing a Gold Crown.

Nine new members were added to the list of active membership, which now numbers twenty-four. Drs. Koch and Ottofy, of Chicago, were elected to honorary membership.

The following officers were elected for the ensuing year.

President, J. J. Jennelle, of Du Quoin; Vice-President, R. H. Canine, of East St. Louis; Secretary, G. W. Entsminger, of Carbondale; Treasurer, C. C. Corbett, of Edwardsville.

The next annual meeting will be held at Centralia on the second Tuesday in April, 1888.

¹ This is one of the district societies recently organized in the State of Illinois, with the view to a thorough organization of the entire profession of the State. These District Societies will, in time, undoubtedly become auxiliaries to the state organization. We are led to regard it as a good plan for large populous states like Illinois where the meetings of the state organization are not always accessible to all the members of the profession on account of distance.—[ED.]

The meeting was a success and the members returned home feeling it was good to have been there.

G. W. ENTSMINGER, Secretary

BROOKLYN DENTAL SOCIETY.

The Brooklyn Dental Society held its regular monthly meeting on last Monday evening at the residence of Dr. M. E. El-mendorf, No. 45 Greene Avenue.

Before the meeting was called to order, the doctor entertained those present with his display of firearms, ancient and modern, and life-like representations in birch-bark of the big trout he caught last summer up in the lakes of Maine. He assured us that he did not exaggerate a hair's breadth in stating their length or a fractional part of an ounce when he mentioned their weight.

After the transaction of a few items of business, the society listened to an able and elaborate paper, prepared by Dr. W. I. Thayer, refuting in the most logical manner the paper read some months ago by Dr. N. W. Kingsley, and which was widely circulated among our profession. The subject has been so thoroughly discussed by the different societies in this section during the last three months, that interest in the matter was not as keen as formerly, but the paper was one to command attention and was discussed at this time by Drs. Brockway and Johnston.

The Brooklyn Society is, in a greater sense than any other with which I am acquainted, a social society, but it is awake to all the practical questions of our profession.

Our society, at its last meeting, appointed a committee to procure some testimonial to present to Dr. J. Rollo Knapp, of New Orleans, as a token of their appreciation of his services to our profession in presenting before us a clear demonstration of his beautiful system of crown and bridge-work.

The committee reported their decision to procure a proper medal with a suitable inscription, which would be completed in the near future.

The committee having the matter in charge are Drs. Will H. Johnston, A. H. Brockway and L. G. Wilder.

The action of the committee received the hearty approval of the society.

W. H. J.

SECOND DISTRICT DENTAL SOCIETY.

The March Meeting of the Second District Dental Society was held at the residence of Dr. F. S. Emerson, 140 Wilson street, Brooklyn, N. Y.

The following gentlemen were elected officers for the ensuing year: President, Dr. J. J. Pitts; Vice-President, Dr. E. C. Wadsworth; Corresponding Secretary, Dr. F. S. Emerson; Recording Secretary, Dr. F. T. Van Woert; Treasurer, Dr. L. G. Wilder; Librarian, Dr. F. W. Moore.

W. H. J.

NEW YORK ODONTOLOGICAL SOCIETY.

The last meeting (April 12) of the New York Odontological Society was notable for the importance of the paper read before it on that occasion, which was the result of the patient labor and observations of Dr. Isaac Davenport, of Paris.

The subject was the influence on the dental arches, of extraction, for producing separations, and resection of the teeth, by filing or other means, for the same purpose; and the essayist presented arguments antagonistic to these procedures, supported by an immense array of models and diagrams, which proved that great loss of masticating power, and in some cases, much distortion of dental and facial expression resulted from such methods of treatment. In the amount of time and study devoted to his subject, and patient elaboration, to present his facts and deductions, Dr. Davenport has taken a long step in advance; for his paper was the most scientific presentation of this, or any subject, which has, within our knowledge, been made before any dental society. The burden of proof has

been thrown upon the advocates of extraction or filing for separations; assertion of views, or of results, will not answer such a presentation of facts; the only argument fit to present will be a demonstration by models and diagrams of favorable results from the treatment which Dr. Davenport has shown is capable of doing so much harm.

Whether the decided opposition of the writer is finally proven to be too extreme or not; and whether or not the models, representing the facts, on which his arguments were mostly based, fairly presented the results of the practice he opposed, or mostly represented the work of bunglers; the profession is greatly indebted to the doctor for starting the discussion of this subject on the scientific basis, the basis of facts. We are sure this subject in all its details—as can only be shown in models—will be studied much more carefully than ever before, as the result of this paper.

We want to work in harmony with nature and her laws, remembering that nature may produce distortion or deformity, we yet want her on our side in all efforts to restore symmetry, beauty and utility. We want as Emerson has said, to “hitch our wagon to a star.”

J. M. H.

CHANGE OF PLACE OF MEETING.

The Executive Committee of the Missouri State Dental Association have decided to change the place of meeting from Kansas City to Sweet Springs. Other journals will please note the change.

RECORDING SECRETARY.

April 27, 1887.

JOHN HUNTER.—The memory of John Hunter will always be kept up by his immortal discoveries in surgery, physiology, and natural history, by his museum at the Royal College of Surgeons, and by the window in the parish church of Kensington.—*Ex.*

DENTAL LAWS.

DENTAL LEGISLATION IN MASSACHUSETTS.

The following bill has passed both houses of the Massachusetts Legislature, is signed by the Governor and now becomes a law.

COMMONWEALTH OF MASSACHUSETTS.

AN ACT TO ESTABLISH A BOARD OF REGISTRATION IN DENTISTRY.

Be it enacted by the Senate and House of Representatives in General Court Assembled, and by the authority of the same, as follows :

SEC. 1. The Governor of the commonwealth, with the advice and consent of the council, shall appoint, after the passage of this act, five skilled dentists of good repute, residing and doing business within the commonwealth, who shall constitute a board of registration in dentistry ; but no person shall be eligible to serve on said board, unless he or she shall have regularly graduated from some reputable medical or dental college duly authorized to grant degrees in dentistry, or shall have been engaged in the practice of dentistry for a period of not less than ten years previous to his appointment: provided, however, that no person shall be eligible to serve on said board who is in any way pecuniarily connected with any dental college or dental department of any college or university.

The term for which the members of said board shall hold their office shall be three years, except that two of the members of the board, first to be appointed under this act, shall hold their office for the term of one year, two for the term of two years and one for the term of three years respectively, and until their successors shall be duly appointed and qualified. In case of a vacancy occurring in said board, such vacancy shall be filled by the Governor in conformity with this section. Any member of said board may be removed from office for cause, by the Governor, with the advice and consent of the council.

SEC. 2. Said board shall choose one of its members president, and one secretary thereof, and it shall meet at least twice in each year. Four of said board shall constitute a quorum, and the proceedings thereof shall, at all reasonable times, be open to public inspection.

SEC. 3. Within six months from the time this act takes effect, it shall be the duty of every person who is at that time engaged in the practice of dentistry in this state, to cause his or her name, residence and place of business to be registered with said board, who shall keep a book for that purpose. The statements of every such person shall be verified under oath before a notary public or justice of the peace in such manner as may be prescribed by the board. Every person engaged in the practice of

dentistry within this commonwealth at the time of the passage of this act, and who shall so register with said board as a practitioner of dentistry, shall receive a certificate to that effect, and may continue to practice without incurring any of the liabilities or penalties provided in this act.

SEC. 4. All persons not provided for in section three may appear before said board at any of its regular meetings and be examined, either orally or by written examination at the option of the several applicants, with reference to their knowledge and skill in dentistry and dental surgery; and if the examination of any such person or persons shall prove satisfactory to said board, the board shall issue to such persons as it finds to possess the requisite qualifications, a certificate to that effect, in accordance with the provisions of this act. All certificates issued by said board shall be signed by its officers; and such certificates shall be prima facie evidence of the right of the holder to practice dentistry in Massachusetts.

SEC. 5. Any person who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor, and, upon conviction, may be fined not less than fifty nor more than one hundred dollars, or confined three months in the county jail, for each and every offence.

SEC. 6. The said board shall charge each person receiving a certificate the sum of fifty cents, and each person appearing before them for examination for a certificate of qualification a fee of ten dollars, which fee shall in no case be returned. Any person failing to pass a satisfactory examination shall be entitled to be re-examined at any future meeting of the board, free of charge, but no applicant shall be examined oftener than twice in one year. Said board shall make an annual report of its proceedings to the Governor, by the thirty-first day of December in each year. All fees received by the board under this act shall be paid by the secretary of the board into the treasury of the commonwealth once in each month.

SEC. 7. The compensation, and all necessary expenses of the board, shall be paid from the treasury of the commonwealth. The compensation of the board shall be five dollars each for every day actually spent in the discharge of their duties, and three cents per mile each way for necessary traveling expenses in attending the meetings of the board, but in no case shall any more be paid than was actually expended. Such compensation and expenses shall be approved by the board and sent to the auditor of the commonwealth, who shall certify to the Governor and council the amounts due as in case of all other bills and accounts approved by him under the provisions of law: provided, that the amount so paid shall not exceed the amount received by the treasurer and receiver-general of the commonwealth from the board in fees as herein specified, and so much of said receipts as may be necessary is hereby appropriated for the compensation and expenses as aforesaid.

SEC. 8. Any person who shall falsely claim or pretend to have or hold a certificate of license granted by any board organized under, and pursuant to, the provisions of this act, or who shall falsely, and with intent to deceive the public, claim or pretend to be a graduate from any incorporated dental college, or who shall practice dentistry without obtaining a certificate as provided in this act, shall be deemed guilty of a misdemeanor, and shall be liable to the same penalty as provided in section 5.

SEC. 9. Nothing in this act shall apply to any practicing physician who is a graduate from the medical department of any incorporated college.

SEC. 10. This act shall take effect upon its passage.

THE BOARD OF REGISTRATION in dentistry of Massachusetts, recently appointed by Gov. Ames, is as follows: Drs. L. D. Shepard, of Boston, J. S. Hurlbut, of Springfield, E. V. McLeod, of New Bedford, G. E. Mitchell of Haverhill, and J. F. Dowsley of Boston.

These appointments appear to give general satisfaction to both the public and profession throughout the state. Massachusetts thus, at last, takes her place in the line of other states in this important matter, and more credit is evidently due Dr. L. T. Foss, of Boston, for this fact than to anyone else connected with the profession.

C. T. S.

DENTAL LEGISLATION IN CONNECTICUT.

The following bill has passed the Senate and House of Representatives and was sent yesterday (March 30) to the Governor for his signature, which it will no doubt receive:

AN ACT TO REGULATE THE PRACTICE OF DENTISTRY.

{ GENERAL ASSEMBLY,
{ JANUARY SESSION, A. D., 1887.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

SECTION 1. It shall be unlawful for any person who is not at the time of the passage of this act engaged in the practice of dentistry in this state to commence such practice unless such person shall have received a diploma from the faculty of some dental college, duly authorized by the laws of this or some foreign country, in which college there was delivered annually, at the time said diploma was granted, a full course of lectures and instructions on dentistry, or shall have had eighteen months' pupilage in a dental office, and in addition thereto shall have attended one full course of lectures in some such college as specified above; or, in case of removal from another state or country, shall have received a certificate from some lawful board of dental examiners, or have had six years' regular dental practice; *provided*, that nothing in this act shall interfere with physicians in the discharge of their professional duties; and further *provided*, that this act shall not apply to any student studying or practicing in the office of any dentist in this state.

SEC. 2. Any person who shall violate the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than fifty nor more than two hundred dollars for each offense.

While it is but little better than no law at all, it may serve as an entering wedge, and at some not far distant day develop into something of value. We are agreeably surprised that even this much has been allowed to pass.

G. L. P.

P. S.—The Governor has signed the bill and it has now become a law of the state.

SELECTIONS.

A COPYING PROCESS.

This process consists in transferring to a pad or tablet, composed essentially of a gelatinized solution of glue in glycerine, writings made on paper with a strong solution of one of the aniline dyes—violet or blue being generally preferred—and from this obtaining duplicate copies of the original by simply pressing sheets of paper on the transfer. The *modus operandi* of the copying is given briefly as follows:

Write with a steel pen on ordinary writing paper; allow to dry; press the writing gently upon the tablet; allow it to remain a minute, when the greater part of the ink will have been transferred to the gelatinous surface, and as soon as the paper has been removed the tablet is ready to take impressions from. Place ordinary writing paper upon the charged tablet, smoothing over with the hand, and immediately remove the sheet, which will be found to bear a correct copy of the original writing; repeat with other sheets until the transferred ink becomes exhausted. Immediately after, wash the tablet with water and a sponge, let it dry, and it is ready again for use.

With a tablet and ink prepared according to the following, fifty good copies from one transfer have been obtained, and doubtless with care it would afford twice this number. The proportions for the pad or tablet are: Gelatine, 1 ounce; glycerine, 6¹/₄ fluid ounces. Cooper's gelatine and pure concentrated glycerine answer very well. Soak the gelatine over night in cold water, and in the morning pour off the water and add the swelled gelatine to the glycerine heated to about 200° Fah. over a salt-water bath. Continue the heating for several hours, to expel as much of the water as possible, then pour the clear solution into a shallow pan or on a piece of cardboard

placed on a level table and having its edge turned up about $\frac{1}{8}$ inch all around to retain the mixture, and let it remain for six hours or more, protected from dust. Rub over the surface a sponge slightly moistened with water, and let it nearly dry before making the first transfer. The ink is prepared by dissolving 1 ounce of aniline violet or blue (2 R B or 3 B) in 7 fluid ounces of hot water, and, on cooling, adding 1 ounce of wine spirit with $\frac{1}{4}$ ounce of glycerine, a few drops of ether, and a drop of carbolic acid. Keep the ink in a well stoppered bottle.—*Scientific American*.

[Secretaries of Societies will find the copying tablet a great saver of time; one can be made with a small outlay of time and money. The formula given is sufficient only for a small tablet, postal card size; for note paper size, use twice the quantity of gelatine and glycerine.—Ed].

EXTRACTS.

NITROUS OXIDE, DANGEROUS.—At a recent meeting of the Société de Biologie, M. Gréhan read a paper for M. Lafont on the accidents following anesthesia by pure nitrous oxide, or laughing gas. It is known that this agent produces anesthesia only by causing a veritable asphyxia, and that its employment is often followed by very grave accidents. Among the consecutive accidents observed by M. Lafont may be mentioned:

1. The death of a fetus in a young woman eniente five months, in whom anesthesia was employed for the extraction of a tooth. The movements of the child ceased on the very day of the anesthesia, and the expulsion of the dead fetus took place a month and a half after.
2. The appearance of albuminuria in a certain number of patients suffering from cardiac disease.
3. The suppression of the menses in a young girl who had just reached puberty.
4. The recurrence of epileptic fits in a young man who, after several years, had had no attack. Other cases occurred, but which need not be entered into here. M.

Lafont, however, observes that there are numerous contra-indications against the employment of pure laughing gas, and he thinks it advisable to give it up altogether in practice.

This note reminds me of a case that was lately tried at the Correctional Tribunal of Paris, at which a dentist, M. Duchesne, was condemned to pay three thousand francs damages and a fine of six hundred francs for having administered laughing-gas to a patient who went to him for the extraction of a tooth, and who, after a few inhalations, fell into a state of syncope and died. The dentist not being a qualified man, must think himself lucky that he got off so easily; but what saved him was that Dr. Brouardel, the medical jurist, declared that he could not affirm that the death of the patient was caused by the anesthesia. All he could say was that the patient's blood contained a certain quantity of nitrous oxide, but that the fatty condition of the heart had a great deal to do with the accident. —*Medical Record*.

PROGRESSION IN TEETH.—Human teeth have a tendency to move forward. This is seen clearly under several conditions. If a molar is extracted, the teeth behind the gap move forward so that the space is almost entirely closed from this movement. If a tooth is extracted in regulating to make room, and we wish to draw back the teeth in front of the gap, we shall find it necessary to have the frame from which the tension is exerted, extend around several teeth behind the space, for if the frame is attached to only one tooth on each side of the space, the tooth behind will move forward much more than the other will move back. This is true even where the tooth behind the space is large and firmly implanted by means of three roots, as in a molar. The following case illustrates this: A canine tooth erupted behind the lateral incisor. There was much pain of a neuralgic character which I could account for only on the supposition that this tooth in some way acted as an irritant to the first bicuspid in which the pain was located. The bicuspid was therefore taken out and an attempt made to draw the canine back. A frame, extending around all the three molars

and second bicuspid, was made and used as the fixed point from which tension on the canine was exerted, but the canine remained stationary, while all the teeth behind began to move forward. It was found necessary to have a plate attached to all the available teeth in the mouth to prevent the teeth from moving forward before the canine moved back. This is an extreme case, as the root of a canine is deeply implanted, but it serves to illustrate this tendency in teeth which I am certain exists. We see it plainly in some of the lower animals, as in the elephant, who has a constant progression of the molars whereby the masticating surfaces are kept constantly renewed.—WM. HERBERT ROLLINS in *Boston Med. and Surg. Jour.*

A PROFESSIONAL HOLIDAY.—Some time ago I became interested in Dr. Arkovy's work on "Differential Diagnosis of Dental Diseases," but soon became convinced that perhaps the shortest way in which to acquire a knowledge of his special system of classification was the acceptance of his invitation to visit him in his far-off home in Buda-Pesth. The Hungarian dentists may be divided into two classes; first, the medical men practising dentistry, and secondly, those who may be perhaps best defined as skilled or unskilled artisans in dentistry. For the education of the latter no provision is made by the State, which has as yet made no recognition of dentistry as a special profession. Several of them, however, by acquiring dental training abroad, are fully equipped with the resources of modern dentistry, and may be classed as reputable practitioners. The majority, however, are a sorry lot; advertising is rife, and the objectionable show-case, with the usual poorly executed specimens, is but too prominent at the street corners. With regard to the education of the medical specialist, the State has appointed Dr. Arkovy and Iszlai as docents, which term may be best defined perhaps as extra mural professors of dental surgery. Dr. Iszlai lectures on general odontology and dentistry once a week, on Sunday afternoons, from 3 to 4, and is justly proud of his fine collection of odontological specimens to which he has devoted much of his time and means. The

Public Dental Institute is under the sole responsible management of Dr. Arkovy, in which he is ably assisted by Dr. Kozma, one of his former pupils. This institution owes its origin entirely to the zealous efforts of Dr. Arkovy, who may well be proud of having founded the first real dental school and clinic in the dual-kingdom of Austro-Hungary. The accommodation, adequate enough at the start, soon proved insufficient for the rapid increase of both students and patients; and the annual grant of 400 gulden (£32) was increased to 500 gulden (£40) by the Minister of Education—which scarcely can be considered a very generous subsidy. Most of the pupils are medical students of three, four and five years' standing, while the remainder consist of young doctors and *rigorosanten*, *i. e.* students who have completed all their courses of studies and are preparing for the final examination. The rapid increase in the number of students from thirty in the year 1881-82 to 175, of whom 30 are fully educated medical men, in the year 1885-86, seems to indicate two facts, viz.:—(1) that the medical profession in Hungary is fully alive to the advisability of a knowledge of the general principles of modern dentistry as an essential in a complete medical and surgical education; and (2) that in this Institute they have an adequate opportunity of acquiring this knowledge. Surely, in this respect, the medical profession in this country may learn something from their Hungarian *confrères*. The dental departments of our medical institutions have not been developed as they might have been; and until they are more consonant in practice with the advances made in our special schools we, as a profession, must accept a share in that apathy of medical men as the result of our own shortcomings.

Each student pays a small fee to the university treasurer according to the number of hours' teaching in the course. The teaching is both theoretical and practical. The theoretical lectures used to be held once a week, and the practical operations and clinical demonstrations twice a week, from 5 p. m. to 6.30 p. m.; but now the latter take up three afternoons and the lectures are given on the alternate days. The subjects of the

course include odontography, structure and development of the teeth and jaws, and anomalies; pathology, embracing the diseases of the hard tooth substances, of the pulp, of the periosteum, of the gum and of the jaws. The academic year is divided into two semesters, and the whole course is completed in each year, but special lectures on extractions are given at the beginning of each semester.

The system of practical teaching is carried out in the following way. As each new patient takes his position in the examining chair, the demonstrator, usually Dr. Arkovy himself, gets the history of the case, makes a careful examination of the present conditions, states his views as to the diagnosis and prognosis, and finally decides upon the therapeutic treatment to be adopted. A blackboard by the side of the chair is in continual use during the examinations, and on the walls are hung tables of Arkovy's classification of dental diseases in Hungarian and Latin. He insists upon the Latin terminology as the only one suitable to their purpose, besides having the advantage of international comprehension.

During the clinic, the more advanced students carry out the conservative treatment which extends over the whole area of dentistry, all the usual filling materials being employed. Before the student is entrusted with a conservative operation on the mouth he has to show his competency to perform the usual operations at the "dry operating table." After the examination of the patients, a demonstration is given of the operations treated of in the previous theoretical lecture. If suitable cases do not present themselves, the demonstrator inspects, in company with the students, the patients operated on, making practical observations on the operation performed.

Finally, as a part of the teaching, scientific and practical questions for research are suggested to the more advanced students. This has resulted in the publication of several papers in the Hungarian medical weekly journal and in the Austro-Hungarian dental journal, while some of them have been deemed worthy of translation and publication in our own journals. No provision is made for teaching mechanical dentistry. Although

the institute is subsidised by the state, the amount is altogether insufficient, consequently the accommodation is not commensurate with the number of students and patients frequenting the clinic. The magnitude and importance of the work which Dr. Arkovy has achieved by his unflagging energy and perseverance is simply astonishing, especially when we remember that the course of dental instruction which the medical student undergoes in this institute is purely voluntary, and that some nine-tenths, if not more, of all the medical students not only pay an extra fee, but give up considerable time to attend the course.—*By George Cunningham, B. A. Cantab., D. M. Harv. in Dental Record.*

BRIEF MENTION.

NASHVILLE MEDICAL NEWS, Vol. I, No. 1, a semi-monthly journal, edited by Richard Douglas, M. D., and John W. McAlister, M. D., issued 1st and 15th of each month. The first number is dated April 1, 1887. The journal is neatly gotten up, and well filled with interesting matter. We quote the following from salutatory: "Facts from the wide and various field of professional observation and effort, responsibly authentic, are of greater value than theoretic or speculative views, however ingenious and able." The price is \$2.50 per annum. Success to the new journal.

WHAT THE PROFESSION NEEDS.—"A full one-half of the young men who come to Philadelphia to study medicine should be turned face about and sent to a village school. The place to intercept incompetents is at the entrance of the medical schools, rather than at their exit."—*Dr. J. E. Garretson.* "The profession is now thoroughly awakened to the necessity of arresting the course of the schools that are annually sending forth thousands of improper persons to practise on the community. * * * The diploma of schools should be be-

yond suspicion. The signatures should do more than convey the mere intelligence that the holder of a certain certificate has paid his money for two courses of lectures and thirty dollars for the engrossed parchment attesting the same. It does little more just now."—*New England Medical Monthly*.

PHYSICIANS' AND DENTISTS' INSURANCE ASSOCIATION is the title of a class department of the North American Mutual Benefit Association, for life insurance. This department is separate and distinct from each of the other departments and is under the supervision and immediate control of its executive committee. Among the noticeable new features presented by this company is the Individual Reserve scheme through which each member builds up his own reserve with which to carry a policy at a future time, when from any cause he may be unable to keep up the payment of his assessments, and the plan of a joint policy, by which husband and wife can join, each being insured for one-half the amount of the policy at the cost of one.

D. Geo. H. Cushing, M. D., D. D. S., and Truman W. Brophy, M. D., D. D. S., of Chicago, are the dental members of the executive board.

A POLISHING DISK CUTTER.—The polishing disks made of sand-paper, etc., can be purchased very cheaply at the dealers, but many dentists have pleasure and pride in making some of their own instruments and materials.

I take a No. 10 ($\frac{3}{4}$ in.) gun-wad punch, and drill a hole up into the centre of the shank. In this hole is driven a steel pin, the free extremity sharpened and on a level with the cutting edge of the punch. From a sheet of sand-paper, shellacked on the back, can be punched dozens of disks, even on the edges, and perforated in the centre ready for mounting.

F. L. D.

A SOLVENT FOR SORDES.—Dr. A. D. MacGregor speaks highly of boric acid as a topical application in the unhealthy condition in which we frequently find the mouth, tongue, and teeth in severe cases of typhoid fever. He says, in the *British*

Medical Journal: The mouth is hot; the lips dry, cracked, and glued to the sordes-covered teeth by inspissated mucus and saliva; the tongue dry, or even glazed and hard, brown or black, crusted with a fetid fur. Under these circumstances a pigment containing boric acid (30 grains), chlorate of potassium (20 grains), lemon-juice (5 fluidrachms), and glycerine (3 fluidrachms), yields very comforting results. When the teeth are well rubbed with this, the sordes quickly and easily becomes detached; little harm will follow from the acid present. The boric acid attacks the masses of bacilli and bacteria, the chlorate of potassium cools and smooths the mucous membrane, the glycerine and lemon-juice moisten the parts and aid the salivary secretion.—*Medical Record*.

A SIMPLE METHOD OF KEEPING THE HYPODERMIC SYRINGE IN ORDER.—Dr. D. Tod Gilliam, of Columbus, O., writes: "A simple and efficient method for keeping the hypodermic syringe in order is as follows: Draw out the piston-rod, immerse the syringe in water, then push the piston home, when the chamber of the syringe back of the piston-head will be found filled with water which entered at the orifice through which the rod plays. This will not leak out, will keep your syringe in prime order, ready for any emergency, and will save money as well as annoyance by enabling you to use a syringe that would otherwise be discarded. As the device is so simple, entails no trouble, and the syringe being once filled need not be looked after for weeks or months if need be, I thought it worth mentioning. *Med. Record*.

RIDICULE has no part in fraternity. We can only reach the highest grade by treating all earnest men with respect, and by pooling our issues, and not finding fault with new propositions before examining them. If you turn a man round and eye him with suspicion, will you elevate him? But if you give respectful consideration to every earnest and honest effort, it will not be long before you will find there is something in every man that is worthy to be taken hold of and utilized for the general good.—*Atkinson in Cosmos*.

BOOK NOTICES.

DUTTON'S ILLUSTRATED ANATOMY. Octavo, 430 pages. The Cynosure Publishing Co., Box 2292, Boston.

We have examined this late work with much interest. It is a popular and at the same time a scientific treatise on the structure of our physical bodies.

One of its distinguishing features—and one that the busy dentist will appreciate—is an explanation in pure English (by aid of parentheses) of all technical terms, so that this basic and useful branch of science is now open to all. It is thus a complete translation of anatomy—a book within a book—and is illustrated with over three hundred engravings.

The text is full and complete, but not so complex as similar works by other authors. Some of the plates are entirely new, and two are beautifully colored, showing vividly the valves of the heart and the systemic and pulmonic circulation of the blood. The cranial, spinal and sympathetic nerves are better shown than in any other work of which we have knowledge, and are thus much more easily learned and remembered. But this work possesses other advantages to commend it also. It is an exhibit apparently of an advance in scientific investigation. The colon, which other anatomists have always considered as a part of the alimentary canal, Dr. Dutton claims to be a drain or sewer for effete and waste matter; the chorda tympani nerve, which is generally considered a branch of the facial, and therefore a cranial nerve, Dr. Dutton considers a sympathetic nerve having its origin not in the brain as a cranial nerve, but in the submaxillary ganglion. The coagulation of the blood, which has generally been held to be an abnormal process, is here treated as a normal process necessary to the building and repair of the tissues.

The classification and arrangement of the whole matter is

more simple; the language is plain; and the summing up of the muscles, bones, vessels and nerves enables the student to fix it all more easily in the mind. It is very complete as a text book and well adapted to not only the general reader or student but, as it seems to us, especially so to the average dentist, combining as it does the advantages of a text book and lexicon. We are not, therefore surprised that "it is fast making its way into general favor."

It is well printed, indexed and illustrated, and bound firmly in leather, sells for the low price of \$5.00. C. T. S.

THE MANAGEMENT OF PULPLESS TEETH. This little monograph is sent out under the auspices of the Odontological Society of Chicago. It purposes to detail a simple, but comprehensive system of treatment, without attempting to present the various other meritorious methods which have from time to time been advocated. It is dedicated to the dental profession of the West.

The subject is treated in a very plain and concise manner, specially suited to the wants of the country practitioner who may not have access to the more elaborate treatises on this subject. The body of the work comprises twenty-eight pages, under ten separate heads, to which is added an appendix containing valuable hints under the following heads:

I. Instructions for making instruments from piano wire for the removal of the contents of the pulp canals.

II. Method of rendering Swiss broaches of Spring temper.

III. Method of rendering Swiss broaches completely soft.

IV. Method of making gutta-percha cones.

V. Bleaching teeth.

VI. Antiseptics and disinfectants.

We presume copies of this work can be had on application to the Secretary of the Odontological Society, Chicago. E.

POSTPONE.—No doubt the meeting of the American Dental Association will be postponed until 1888.—[Ed.]

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In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

They will be found in all the leading stores where such goods are sold, and where Dentists can recommend their patients to call for them. This obviates the necessity of Dentists keeping such preparations, which has proved by experience to be generally unprofitable. I should be pleased to forward a sample of my TABLETS or POWDER to any Dentist, free of expense, on receipt of a postal card giving address, that all may have an opportunity to test its merits. I am,

Respectfully yours,

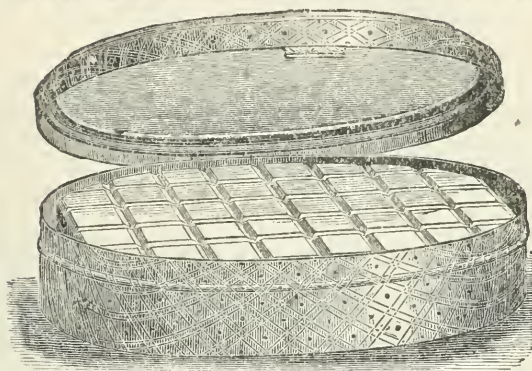
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ANNOUNCEMENT OF THE SPRING COURSE

—OF THE—

CHICAGO COLLEGE OF DENTAL SURGERY.

CHICAGO, February, 1887.

This course will begin Monday, April 5th, and terminate the 22nd of the following June.

This course of instruction will be chiefly of practical nature. There will be two lectures delivered daily—a portion of each hour being occupied in quizzing and recitations—beginning at 8 A. M., thereby enabling the student to occupy the remaining hours in actual practical work in the physiological and chemical laboratories and in clinic rooms, treating and filling teeth, constructing artificial dentures, etc.

The following well-known and competent gentlemen will compose the Spring Faculty:

J. E. Jenkins, D.D.S., Lecturer on Chemistry.	J. G. Reid, D.D.S., Lecturer on Materia Medica.
J. W. Wassall, M.D., D.D.S., Lecturer on Anatomy.	J. D. Moody, D.D.S., Lecturer on Pathology.
Garret Newkirk, M.D., Lecturer on Dental Irregularities and Hygiene.	W. B. Ames, D.D.S., " on Prosthetic Dentistry.
L. L. Davis, D.D.S., Lecturer on Histology and Microscopy.	Louis Ottoby, D.D.S., " on Physiology.
C. N. Johnson, L.D.S., D.D.S., Lecturer on Operative Dentistry.	Edwin C. Timmerman, D.D.S., Lecturer on Therapeutics.
	Godfrey S. Salomon, D.D.S., Lecturer on Clinical Dentistry.

DEMONSTRATORS.

W. A. Jones, D.D.S., Operative Dentistry.	J. E. Hinkins, D.D.S., Chemistry.
W. G. Stowell, D.D.S., Operative Dentistry.	L. L. Davis, D.D.S., Microscopy.
	H. P. Smith, Prosthetic Dentistry.

The Spring Course is preliminary to the regular winter course; it is, indeed, the *beginning of the college year*; it assumes that one entering the class is without any knowledge of dentistry, and yet it is prepared to meet the wants of students far advanced in their studies. It is intended to take the place of office instruction, and students without dental knowledge, as well as those more advanced, who wish to avail themselves of the great advantages offered for practical work and instruction are earnestly advised to enter the spring term.

During the last week of each spring term, the student will be examined, and will receive certificates of attendance and grade of examination. This course cannot be considered as equivalent to a *course of lectures* in the requirements for graduation.

THE COLLEGE

Is located at the N. E. corner Madison st., and Wabash ave. It will be open the entire year for the treatment of patients and clinical instruction, under the supervision of competent demonstrators, who will be prepared to give instruction in all new methods as they come before the profession.

FEES FOR THE ANNUAL SPRING COURSE.

Matriculation Fee (good till the following April)	- - - - - \$ 5.00
Lecture Tickets	- - - - - 20.00

This amount will be deducted from the fees of the next following winter session.

Graduates of the college are admitted on payment of the Matriculation fee only. Graduates of other regular dental colleges on payment of Matriculation Fee and ten dollars. (\$10.00). Fees for practical chemistry, \$5.00.

Instruments and appliances for clinical departments will cost from \$25 to \$40.

Board, including light and fuel, can be obtained at a convenient distance from the college, at from \$4 to \$6 per week.

Letters of inquiry should be addressed to the Dean,

DR. TRUMAN W. BROPHY,
125 State Street.

Announcement for regular course, 1887-88 will be issued early in the summer.

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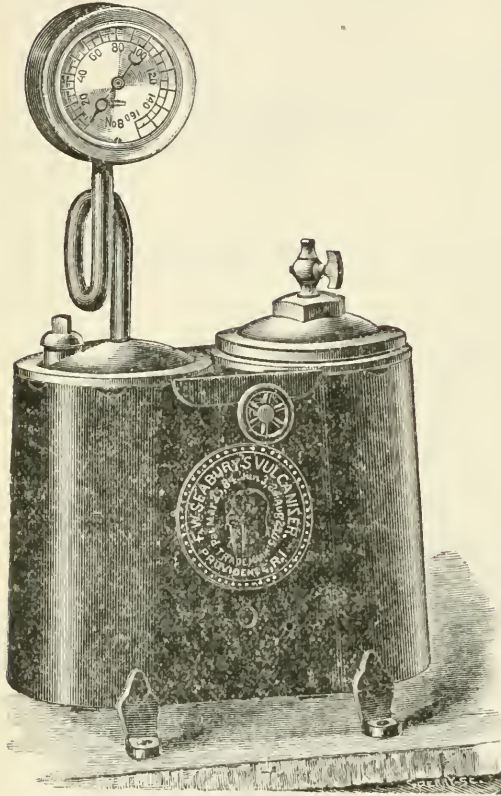
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As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondents, as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

The ARCHIVES is not in the least degree controled by any association or dental supply house, but is independent and published in the interest of the entire profession. The price is reduced from \$3.00 to \$2.00 per year. Those of our present subscribers who have already remitted \$3.00 for this year will have \$1.00 credited on next year's subscription without they otherwise direct. To those that have discontinued or are not now subscribers, we solicit them to sign blank below and mail to us early.

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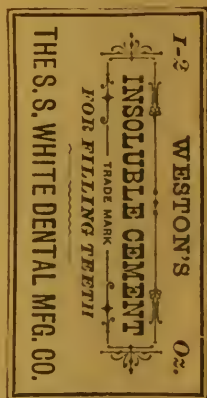
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THE Archives of Dentistry.

A MONTHLY RECORD OF DENTAL SCIENCE AND ART.

VOL. IV., No. 6.]

JUNE, 1887.

[NEW SERIES.]

ORIGINAL ARTICLES.

CERTAINLY IT IS EXCELLENT DISCIPLINE FOR AN AUTHOR TO FEEL THAT HE MUST SAY ALL HE HAS TO SAY IN THE FEWEST POSSIBLE WORDS, OR HIS READER IS SURE TO SKIP THEM; AND IN THE PLAINEST POSSIBLE WORDS, OR HIS READER WILL CERTAINLY MISUNDERSTAND THEM. GENERALLY, ALSO, A DOWNRIGHT FACT MAY BE TOLD IN A PLAIN WAY; AND WE WANT DOWNRIGHT FACTS AT PRESENT MORE THAN ANYTHING ELSE.—*Ruskin.*

CEMENTS.

BY A. MORSMAN, M. D., D. D. S., OMAHA, NEB.

Cements, like amalgams, are being more and more generally used. Like the latter, they are secret preparations, proprietary articles, the formulæ of which are, as a rule, unknown to the dentists who use them. It is a matter of regret, nay *shame*, that a liberal and learned profession having its schools and colleges should be so under the thumb of the nostrum vender. But that isn't what I intend to write about. Having experimented considerably with the cements known as the oxy-phosphate and oxy-chloride of zinc and having arrived at results quite as satisfactory as can be obtained with any of those sold in the shops, I wish to say a few words about them.

ZINC OXY-PHOSPHATE.—This nomenclature expresses, or it is intended to express, a mixture of the phosphate and oxide

of zinc. There has been a great deal of ignorance displayed in the discussions of this material and a great deal of confusion created by those interested in its manufacture. Dentists are, unfortunately, not chemists, and so are frequently led into serious blunders when discussing complex chemical subjects, a matter not at all to their discredit for few men who become noted in dentistry can be experts in chemistry also, and although I wish to call attention to some misstatements that have become a part of our teaching, I do it with all kindness and respect. Professor Flagg in his "Plastics and Plastic Filling," page 163, makes a distinction between the phosphates and the oxy-phosphates. He speaks of the "obdurate nitrate of zinc as their powder," meaning the powder from which the cement is made, and says that those preparations which have the nitrate of zinc as the powder "are entitled to the appellation, Zinc Phosphates," and, for that reason. Nitrate of zinc! "obdurate" sure enough in this connection. He has evidently been misled by his manipulation. It would be impossible to make a cement of such a combination as he speaks of. Nitrate of zinc is a caustic used in the same manner as nitrate of silver, or caustic potash, either in pencils or paste. It is very soluble, and absorbs moisture so readily that to keep it the U. S. Dispensatory directs to place it in a tin box containing quick lime.

Dr. Niles, the maker of "Lithoid" cement, states that the oxide of zinc is reduced to the sub-oxide, and gives his process for this reduction. I am of the opinion that there is no sub-oxide of zinc known, and in this I have been confirmed by consultations with experts. Nor will his process succeed when the U. S. P. oxide is used, although it might with the commercial oxide. It is possible that by long heating in a closed crucible as he directs, an intimate mixture of the oxide and metallic zinc might be made, but I do not see anything to be gained by it.

There is a great difference between the U. S. P. oxide of zinc which is pure, and the commercial oxide, which is slightly impure, in their action with phosphoric acid, and yet it is difficult to see why. The commercial article is almost pure. There are several impurities, but none of them exceed a frac-

tion of one per cent. This article is readily miscible with a syrupy solution of glacial phosphoric acid, works like putty, hardens nicely and is worthless as a cement. The officinal oxide will not mix with the fluid until it is specially prepared.

The manner of preparing it is nearly the same as the process for Sorrell's cement.

I believe I shall have the privilege of giving the first working formula for this cement. It is as follows: Take of zinc oxide U. S. P. and pure nitric acid each equal parts by weight. Spread the oxide upon a large glass slab (a window glass will do) and sprinkle or drop the acid upon it little by little. Mix with a wooden spatula, transfer to a crucible and subject to a strong heat until it is a bright yellow. Maintain it at this point for about 30 minutes. Remove, and when cold reduce to fine powder in a mortar and pass through fine sieve. This is the powder. The liquid is made thus: Take of glacial phosphoric acid one ounce, and rain water two ounces. Dissolve by gentle heat, and filter through paper. Place in a glass or porcelain capsule and evaporate over a sand bath until the fluid begins to thicken. Allow it to cool gradually. Crystals will form, and after two or three days pour off the liquid, and it is ready for use. Or, the evaporation can be continued until the product measures six drams. In a small way the former is the most accurate. Should the fluid, as thus prepared, not work satisfactorily add to it a little water—two or three drops at a time—until it works properly.

If it is desired to use crystals instead of fluid, evaporate until the solution is quite thick while hot: cool, and when crystals have formed, drain them dry. It is said that the crystals make the most durable cement. I have been unable to see any difference. They are much more troublesome to use.

These processes are quite simple, and any dentist can prepare this cement for himself at about one-twentieth the cost of the proprietary article and have the satisfaction of using a preparation of known formula.

Neither the fluid nor the powder will keep good for longer than three months, that is, they are unreliable after that time

when the bottles are constantly being used from. The powder can be easily revived by calcining again, but the liquid had better be thrown out.¹ A cement is unfit for use whenever it hardens quickly on the addition of a small amount of the powder becoming somewhat granular and, if worked with the spatula, again soft. Its final setting is without strength.

I do not understand the change that takes place in the oxide of zinc when undergoing preparation. It is quite certain, however, that the nitrate which is undoubtedly formed by the addition of nitric acid is again decomposed and reduced to the oxide by the heat. The difference between the product and the officinal oxide is very great. It loses in bulk without loss in weight. In its primitive state it was not miscible with the phosphoric solution except with the greatest difficulty, and was totally unfit for use as a cement, but when completed it is readily mixed and works like putty. It very much resembles the commercial article, but makes a very much better cement. Mere calcining will not cause the change, nor will the addition of nitric acid alone.

I do not think any of these cements are entitled to be called zinc phosphates. They all contain when mixed, oxide of zinc in excess, they are probably mixtures of the orthophosphate and the oxide. They are, therefore, rightly called oxy-phosphates.

ZINC OXYCHLORIDE.—Sorrel's cement was a material of "great expectations," but has not now a very wide application. Still, it is entirely too valuable to be without. Its preparation is very simple. The liquid is merely a solution of chloride of zinc. I make it as follows: Chloride of zinc one ounce, water one dram. Dissolve and filter or decant. This is for a quick-setting cement. For a slow-setting cement use half an ounce of water to one ounce of the chloride. The powder is the same as the one which I have just given for the oxyphosphate cement. I use from the same bottle for both.

¹Since the above was in type I have found that the deterioration of the liquid is due to evaporation, and the addition of a few drops of water restores it.

Prof. Flagg constantly speaks of this as Sorrel's cement in his work, but the formula he gives¹ is not the one given by M. Sorrell, but is a much inferior one, originated I believe, by Dr. Metcalf.

I hope other dentists will try these formulæ and improve upon them. It is time that dentistry rose above nostrum vending and nostrum using. If the American Association would adopt and endorse a series of formulæ for preparations that dentists are constantly using, druggists or depot men would prepare them, and the nostrum shame would be abated. Not only that, but there would be a chance for improvement, for if a man knows what he is using, he is likely to modify it to suit his wants. This would be much better work for the association than the advertising (by essays, etc.) of proprietary articles and patented processes.

INJURIOUS EFFECTS OF CHEWING GUM.

BY F. L. DOLBEARE, M. D., OSHKOSH, WIS.

For many years the habit of chewing gum has been prevalent among children, and now it is considered fashionable with those of older growth. The manufacture of the article varies from purifying the crude gum and producing it into marketable forms, to the making of those mysterious compounds known only to the manufacturers themselves. There is no doubt that the chewing-gum made from sweetened, flavored ingredients works more direct injury than the simple gum.

Without entering into the chemical action that these various gums produce, doing more or less injury, let us look at the damage done by the excessive mechanical action, the jaws are called upon to perform by chewing. The regular confirmed gum-chewer, excited by the habit, induced to follow the fashion, however foolish, and advised that it is healthy by those

¹Plastics and plastics filling, p. 158.

corrupted by the same passion, wants no excuse to work the jaws over the false *pabulum* in private or public places. The result is, the salivary glands instead of being called upon to pour forth their products three or four times a day, are worked and incited to their utmost capacity. Now the damage done by this simple process is two-fold. It vitiates the saliva, and weakens the action of the stomach. The parotid and sub-maxillary glands, to a greater and less degree produce the most saliva; and the peculiar active principle of saliva, ptyaline, a substance which converts hydrated starch (cooked starch) into sugar.

It seems singular that the manufactured gum should make demands on both of these organs, for the movement of the jaws excites the action of the parotid, while the sense of taste acts on the other. Now a person masticating all day weakens the chemical action of the saliva. It is produced in too great quantity, and at the expense of the active ptyaline, for the watery element is in excess of the usual proportion. The result is that when food is masticated it receives a weakened saliva, and consequently enters the stomach ill-prepared for action there. The nervous temperament of the mouth is deadened by the highly flavored gum, until there is no relish in food unless it is over-spiced. During the interim between meals the gum-chewer is pouring into the stomach the vitiated and weakened saliva, until that organ becomes a sewer of discharge, instead of a quiet, respectable organ working eight hours a day. No wonder it strikes sooner or later, and the end is, that the advice of the friends brings the sufferer to an unhealthy condition, where pepsin, nux vomica and diet alone bring relief.

OVERTAXING OUR PATIENT'S STRENGTH.

BY DR. ELBRIDGE C. LEACH, BOSTON.

I believe it the duty of every dentist to rigidly insist on a wise and judicious care of our patient's powers of endurance.

Not long since a lady, æt. 24 years, sat and I extracted twelve superior teeth, without administering ether. I urged her to take ether, but without avail. She bore the pain with perfect courage, and went away feeling perfectly well. On reaching home she experienced a sinking sensation, and was obliged to take her bed. A physician was called, and he found her pulse to be bad in character and 100 beats per minute. She was unable to sleep during the night, but had frequent sinking symptoms which, however, left her by morning. At the end of one week she was just able to be about the house. The same patient visited me subsequently, and wished four inferior molars extracted. I insisted on administering ether, and she gave her consent. I fully etherized the patient and extracted the teeth. In one hour's time she had fully recovered from the ether and had not the least trouble afterward. What is said of extracting is quite as true of overtaxing our patient by long and painful operations for filling. Our patient's courage may be good, but their powers of endurance inadequate.

A CASE OF IMPLANTATION.

BY D. W. FELLOWS, M. D., PORTLAND, ME.

The inferior left lateral incisor was extracted two years previously on account of extreme loosening and soreness, the alveolar process being almost entirely destroyed by *phagadenic pericementitis*. The implanted tooth was extracted on the same day of the operation, and kept in warm water except while drilling the tooth, removing the pulp and filling.

The patient was a lady about thirty years of age. A clean cut was made through the gum and a socket formed by the use of drill and burs.

Bleeding was arrested, the socket carefully cleansed and bathed with bichloride of mercury, 2 to 1,000, the tooth being also immersed in the same solution. The tooth was then pressed gently but somewhat firmly to place and fastened with silk ligatures which were allowed to remain two weeks.

This operation was performed March 24, 1887, and the tooth is now comfortable and the parts apparently healthy, though this as well as the other incisors, is somewhat movable owing to the absorption of the process.

CHRONIC DIARRHŒA FROM WEARING A VULCANITE PLATE.

BY DR. E. C. BRYANT, PITTSFIELD, ME.

In the summer of 1879 Mr. M——, aged about 23 years, a well-educated young man and a student of medicine presented himself at my office to consult me in regard to his teeth.

Six years previously I had known Mr. M—— as a robust young fellow almost the picture of health. He was now in a very weak and emaciated condition. I inquired the cause of his poor health, and he said that for nearly six years he had been a great sufferer from chronic diarrhœa, and notwithstanding the best medical skill had been employed, he had been unable to obtain relief. He was very despondent, and had given up his medical studies.

For about six years he had been and was still wearing an upper plate of red vulcanite containing the two superior central incisors. On learning that his trouble commenced in about three months after the teeth were made and had continued ever since, I recommended that he at once discontinue the use of the plate, my advice was followed, and in less than two months a very marked improvement was the result, in fact he was nearly well, and there never has been a recurrence of the trouble. He is now a healthy young merchant, and he has repeatedly told me that he owed his life to my advice.

In the course of my practice I have seen several cases where bowel troubles *seemed* to be produced from wearing teeth, but I never have seen a case where the effect was so marked and apparent.

SOCIETIES.

PAST AND PRESENT OF DENTISTRY.

EXTRACTS FROM AN ADDRESS BY DR. C. R. E. KOCH, OF CHICAGO, ILL

Delivered before the Southern Illinois Dental Society and Public May 12, 1887,
Duquoin, Ill.

The future historian who shall be called upon to comment upon the distinctive features that mark the time in which we are living will find abundant material all about him.

It is the time of steam, electricity, labor and time-saving inventions. It is the era of nearness, the locomotive, telegraph and telephone, shorten distance and time.

It is this desire, no doubt, for men to be nearer to each other, and to profit from this nearness, which underlies the great distinctive social feature of this latter half of the nineteenth century, which may fittingly be termed the epoch of societies and associations.

Wherever there are men having certain tastes or tendencies, or interests in common, there seems to be the desire, if not the necessity as well, to form an association that shall bring these men in closer relation to each other, and the result is the formation of a society with its periodical meetings. Who is wise enough to say how much of our advanced civilization is owing to this frequent and liberal interchange of thought? Who is bold enough to deny that this social fabric of our times has been an immense stimulant and potent lever in the scientific and material progress of the world? * * *

To-night we assemble here to welcome into being a new association, the Southern Illinois Dental Society. This society is

organized, and it is hoped will always work upon motives different from the usual main-spring of action pictured. (The mighty dollar). It is formed upon the invitation of the Illinois State Dental Society, which has labored for twenty-three years in this state for the purpose of making those to whom the people intrust the care of their teeth, better qualified.

* * * Dentists have not stood pat on the deal given them by their fathers, but they have been drawing all the time and are liable to draw as long as mankind has teeth. * * *

Dentistry is a profession in whose presence Popes and potentates are silent, and that can with impunity muzzle the mouths of forum and pulpit, and strike dumb its eloquence.

Dentists can in their gentle but imperative way command a lady to hold her tongue, and hush the fascinating and irresistible accents of her melodious voice into temporary repose by the gently expressed invitation to "open your mouth please."

* * * The birth of dentistry as a special profession really only dates from the seventeenth century. Toothache was believed to be caused by a worm, and Ambrose Paré gives various forms of words in use in his time to cure the toothache. I cannot tell you exactly what sentences they were, but I have frequently heard men suffering from this malady use forms of words which were neither scriptural, refined nor polite, in modern days; I cannot testify as to their curing properties, but they certainly seemed to give a great deal of relief to the afflicted. * * *

The structure, anatomy and physiology of the teeth were first thoroughly studied in the eighteenth century and it was not until 1839 that Dr. Nasmyth described in London the membrane that covers the enamel of the teeth, although Job of old fully understood that part of his anatomy over 3,000 years ago, for he speaks of escaping with the skin of his teeth. * * *

The first dentist in the United States, which is really the cradle and nursery of modern dentistry, was John Woofendale. He came to New York in 1766, he practiced there and in Philadelphia, but returned to England in 1768. From this

time to the Declaration of Independence there was not, so far as known, a regular practicing dentist in these colonies. Joseph LeMaire, a French dentist who came with the French army, settled in Philadelphia in 1784, and instructed several persons in the profession, and is hence entitled to be called the father of American dentistry. Dr. Josiah Flagg, of Boston, was the first native American dentist. He obtained his instructions from LeMaire.

John Greenwood is said to have been the first to strike up a gold plate as a base for artificial teeth in 1799.

The first apostle of dentistry in the West seems to have been Paul—Dr. Paul—and he settled in St. Louis. As a Chicagoan and hence as a man of veracity—I am reluctantly compelled to admit that St. Louis had a dentist when Chicago was only a howling wilderness and when St. Louis had a population as a frontier trading post, of say 3,000 people. Well St. Louis used to beat us.

In 1828 Dr. Ellis who practiced in New Orleans advertised as follows :

“Dr. Ellis, surgeon dentist, will return to St. Louis in July to resume the practice of his profession (for two weeks only). During his absence he has availed himself of some recent improvements connected with his profession, including the manufacture of Terra Metallic Teeth, which are incorruptable.”

This is the first record of porcelain or mineral teeth used in the West. * * *

From these small beginnings dentistry has grown to be a profession comprising over 15,000 members in this country alone. What an army of men to live from hand to mouth.

Assuming that each one of these men only in his annual practice uses three ounces of gold, and this is an average too low, we find that each year more than a ton and a half of gold and of value over three-fourths of a million of dollars is buried out of sight, though it may be to “memory dear.”

[The doctor's address was quite exhaustive, containing nearly 8,000 words, hence too lengthy for this journal, but we have endeavored to give the gist and jest of it. The address was an admirable one for a public audience.—Ed.]

BROOKLYN DENTAL SOCIETY—A BAD NIGHT.

The April meeting of the Brooklyn Dental Society was held at the residence of Dr. C. B. Parker on Remsen street. It was a terribly stormy night, and the essayist of the evening was found to be too sick to venture out, so it was with some feeling that the evening was a foreordained failure that we heard the chairman's gavel fall. But as is often the case, out of the most unfavorable surroundings and under the most discouraging circumstances we are permitted to pluck the richest and sweetest fruit. Of course having no regular paper and no set topic for discussion, affairs took the form of an "experience meeting" and in a body of intelligent, observing dentists of any considerable practice I know of nothing that can prove of greater mutual advantage than a free discussion of what we have termed "incidents of office practice."

On this occasion the ball was opened by Dr. Geran, who told us of his successes and his failures in attempting to follow out the precepts of Dr. Younger in the implantation of teeth. On the whole he was much encouraged to go on believing that except in cases presenting certain unfavorable conditions, success could reasonably be expected. The tide turned to the treatment of pulpless teeth, and here we found that all had their troubles to relate, questions to ask and experience to give. It was apparent in a few minutes that a rich lead had been struck and that rightly worked would pan out well. But it did not need working, it just worked itself. Dr. Abbott related how he had opened up into a pulpless tooth and what a beautiful circus he had (or rather the patient had) for the next three days. All were ready to offer their sympathy, for alas most of us had been there; some were ready with their suggestions of treatment so as to avoid all possibility of trouble from the opening into the roots of such cases. Dr. Cook thought it was better to let such teeth alone unless they were giving trouble, and Dr. Brockway thought it best to go for them at once and so avoid possible trouble. He favored a thorough cleansing of such a tooth with floods of hot water

before treatment with disinfectants. Dr. Cook thought in opening up into the tooth the cavity should be so filled with a disinfectant that even the air could not get in.

Dr. Johnston related the case of a lady who came to him with a complaint of suffering from severe neuralgia for months. No swelling had taken place; no tooth could be found sensitive to the touch. The two bicusps and first molar were filled with immense black amalgam fillings and so discolored, that one might be justified in declaring them all to be pulpless, and yet it might be only the result of the black fillings. He decided to open up into the second bicuspid which, from there being no soreness was easily done. Sure enough the pulp was gone leaving but an odor behind. Cleansing carefully with warm water, and sending the patient away, he found on her return that all the neuralgic pains were gone. Treatment was continued with disinfectants, the tooth filled and the patient dismissed.

So one case after another was brought up of troubles more or less remote, obscure cases of neuralgia caused by pulpless teeth, abscesses in the ear that all ceased when the grinders were put in order; the talkers became more and more numerous, and more and more interested in the theme as the hour drew near for closing. It showed us clearly what a subject of ever increasing interest to our profession is this one of pulpless teeth. It seems as though more teeth lose their pulps than was formerly the case. Perhaps they do. We don't destroy an exposed pulp as we did twenty years ago, we have been taught better, or at least differently; but I wonder if most of these pulps don't die after all. When a dentist says he don't have any use for arsenic or any other agent for the devitalization of a pulp, I wonder if he is not going a little farther than good judgment and a conservative practice will allow. When a dentist insists upon capping over every exposed pulp that is brought to his office, if they do not come back with swollen lip or extended cheek he congratulates himself upon his skill and denounces the man who unnecessarily destroys life. I wonder how many of these rapidly increasing, obscure cases of

neuralgia might be traced to the exposed pulp so beautifully
"capped" years ago.

W. H. J.

ALABAMA DENTAL ASSOCIATION.

The Alabama Dental Association held their regular annual meeting in the county court rooms at Tuscaloosa, Ala., April 5 to 8, 1887, President R. N. DuBois, of Greensboro, presiding; T. M. Allen, secretary. There were some forty dentists in attendance. Several visiting dentists, from a distance were present. Among them Prof. W. H. Morgan, M.D., D.D.S., Dean, Dental Department, Vanderbilt University, Nashville, Tenn.; Prof. J. Y. Crawford, D.D.S., Prof. of Operative Dentistry, Dental Department University of Tennessee, Nashville, Tenn.; Prof. John H. Coyle, D.D.S., Thomasville, Ga., Prof. of Operative Dentistry, Baltimore College of Dental Surgery; J. R. Walker, D.D.S., and Mrs. M. W. J., New Orleans, La.; Wm. Crenshaw, D.D.S., Atlanta, Ga.; A. C. Strickland, D. D. S., Anderson, S. C.

The meeting was very interesting. There were several instructive papers read and discussed. Among them one from W. H. Atkinson, M.D. D.D.S., New York on "Duty of the Dentist;" one from L. P. Haskell. D.D.S., Chicago, "Artificial Dentures, Causes of Failures;" one by Prof. John H. Coyle, D.D.S., Thomasville, Ga., "Is Dentistry a Specialty of Medicine in the General Acceptance of the Term;" one by J. R. Walker, D.D.S., New Orleans, La., "Dentistry, Past, Present and Future." These papers were well written and just what might be expected from these distinguished gentlemen. They elicited considerable discussion, and were highly appreciated by all present; several valuable papers of members were also read and discussed.

The president in his address makes the following suggestion (extract from address): "Would it not be a splendid idea for each association within our borders to perfect a plan and put a free lecturer in the field, one who will visit all important

towns and cities, secure audiences both in colleges and Y. M. C. A. bodies, and thus instruct young and old as to a proper care of the teeth ; each association should be willing to contribute a given amount to the sum needed, and this added to what all the dentists might individually raise, would be sufficient to keep an able man in the field all the time. Such a person could stir up the interest, and new enthusiasm, in associated work also, which would result in a large increase in practice and double the attendance in our associations and put dentistry on a firmer foundation than ever before. Let Alabama be the acknowledged leader in this good work, as she was the first to make legislative enactments to regulate the practice of dentistry, and having once set the ball rolling, another and another state will follow her example until the enthusiasm roused in the hearts of the people will give the profession a glorious start up the hill of fame."

This clause elicited much discussion and brought forth the following resolutions and committee :

WHEREAS, The rapid strides that are being made by our profession in all its branches, impose on us the additional duties of making known to the people in some practical way, the advantage to be derived from instruction in dental hygiene.

Resolved, That the time is now at hand when a practical lecturer should be employed and instructed to visit our schools, both public and private, and deliver lectures of a plain and simple character to the pupils and public, instructing them in the proper way to care for the teeth.

Resolved, Further, that this Association recommend and urge the Southern Dental Association to make arrangements to that end, and pledge ourselves to contribute to the fund necessary, and we believe all other state societies will gladly do likewise.

A committee of three composed of W. D. Dunlap, Selma, G. M. Rousseau, Montgomery, and George Eubank, Birmingham, Ala., were appointed to examine into this matter and to correspond with other state societies on the subject and to lay it before the Southern Dental Association at their next meeting.

Several of the physicians of the city attended the meetings and expressed themselves as being very much interested in the discussions and papers. Dr. Peter Brice, President of the State Insane Hospital, said he had been very much interested in the papers read and the discussions, and that he was more impressed than ever, with the fact that dentistry was a specialty of medicine and that the sooner the medical profession recognized and acknowledged it, the better for them. That the dental profession were making rapid strides in pathology and oral surgery, and if the M.D.'s did not look sharp, the dentists would soon be ahead of them in those branches and especially oral surgery. Dr. Brice invited the Association to visit the hospital for the insane on Thursday afternoon, and General H. D. Clayton, President of the State University, invited them to visit the University, and to witness the batallion drill by the cadet corps; both invitations accepted. Clinics were held Thursday morning, Prof. John H. Coyle gave clinic with the Herbst method, using Williams' cylinders; Dr. Wm. Crenshaw used electric mallet and Perry's separators; Prof. J. Y. Crawford used hand pressure and Williams' cohesive foil without annealing; T. M. Allen, clinic with Steurer's plastic gold (furnished by Messrs. Johnson & Lund, Philadelphia, Pa.) Restoring contour and grinding surface and cusps of second left superior bicuspid. This gold worked very nicely and made a very hard and compact filling, it contoured nicely, and finished up as well as any of the cohesive foils, and the filling was done in much less time than it could have been done with foil. The clinics were well attended and were of much interest, especially the Herbst method and the plastic gold.

Drs. E. S. Chisholm and S. C. Wilkerson, the local dentist, gave a magnificent banquet to the dentists and medical profession of Tuscaloosa, at the Washington Hotel, on Thursday night. In response to one of the toasts, Dr. Sealey said he had never seen a finer looking body of men than the dentists present, and that they must have exceedingly sweet and amiable wives and sweet-hearts! that there was not a single bald head among them."

The State Board of Dental Examiners met at the same time and place. They had nine applicants for license (under the new law approved February 28 last, requiring all dentists to stand an examination; recent graduates had to be examined); only six passed a satisfactory examination.

Officers elected for the ensuing year: President, T. P. Whitby, D. D. S., Wetumpka, Ala.; First Vice-President, A. Eubank, D. D. S., Birmingham, Ala.; Second Vice President, S. C. Wilkerson, D. D. S., Tuscaloosa, Ala.; Secretary, T. M. Allen, D. D. S., Eufaula, Ala.; Treasurer, G. M. Rousseau, D. D. S., Montgomery, Ala.

State Board of Examiners: E. S. Chisholm, D. D. S. Tuscaloosa, for five years; Geo. Eubank, D. M. D., Birmingham, for four years; W. D. Dunlap, D. D. S., Selma, for three years; G. M. Rousseau, D. D. S., Montgomery, two years; C. P. Robinson, D. D. S., Mobile, one year.

Executive Committee: R. E. Wakins, D. D. S., Eutaw, Ala.; E. Wagner, D. D. S. Montgomery, Ala.; J. C. Wilkerson, Selma, Ala.; Messrs. Johnson and Lund, Philadelphia, Pa.; Messrs. Morrison Bros., Nashville, Tenn.; The Keller Medicine Co., Fort Wayne, Ind., made handsome displays of dental instruments and material.

"Mrs. M. W. J." was present and reported proceedings of the meeting, which will be published in Transactions.

Adjourned to meet in Selma, Ala., on the second Tuesday in April, 1888.

T. M. A.

THE CARE AND TREATMENT OF DECIDUOUS TEETH.

BY GEO. F. CHENEY, D. D. S., ST. JOHNSBURY, VT.

Extract from a paper read before the Vermont State Dental Society, March 18, 1887.

In operating for children we should remember that they are to be our future patients. Be kind and considerate, but firm, and have a strict regard for the truth.

In general, the deciduous teeth have received attention only when the sufferings of the child have rendered palliative treatment necessary, preventive treatment being comparatively a rare procedure.

To guard against this neglect the mother should be taught that it is very necessary that the child should be brought early to the dentist.

The child should be taught the use of the brush as soon as it has sufficient intelligence to learn it, and previous to that, this duty should be done for it.

The teeth should be brushed three times a day with a soft brush on which has been placed a little soap or precipitated chalk, brushing up, down and across.

The six, eight or ten dollars spent on the deciduous teeth are, so far as I know, the best dollars for the number ever spent during a whole life.

This expenditure, if properly managed, accustoms the child to the dentist, relieves it from much suffering, relieves the parents from much trouble and worry, and oftentimes from many wakeful nights, and almost positively insures a properly placed set of permanent teeth, gives opportunity for overlooking the placing of the first permanent molars so often neglected as first teeth, and also for filling the permanent teeth while the cavities are small, a thing very unlikely to occur unless the deciduous teeth are placed under charge of a dentist.

Deciduous teeth are filled for temporary purposes, therefore I do not use, neither would I advise the use of, gold for filling these teeth, since it is desirable to avoid long, tedious sittings as well as unnecessary expense. When the cavities are in the molars and small, amalgam is the best material to be used.

When the cavities are large, I line them with gutta-percha, being careful to cover the bottom well, then using amalgam or some of the oxyphosphates to fill out the cavity.

I use gutta-percha for a lining, as in my mind it is the best material for the purpose, being both non-conducting and non-irritating, feeling sure when I use it the pulp will be protected, if anything will protect it. I also use gutta-percha in filling deciduous teeth where the walls are weak and frail.

In filling the front teeth I almost invariably use an oxyphosphate, telling the parents of its liability to fail, and at what point, urging upon them the necessity of frequent examination by a dentist. When filling these teeth we must remember that the pulps are larger and nearer the enamel than in the permanent teeth.

When I find the pulp exposed and irritated, I use medicaments to sooth it, and disinfect the cavity, trying to get the tooth in condition to be filled, using gutta-percha alone in this case, for the filling material.

When death of the pulp of a temporary tooth becomes necessary, which is exceedingly unfortunate, great care should be used, as by this time absorption has gone far enough to make the use of arsenic dangerous from its liability to get through the root. Creosote I think the safest and best medication we can use for this purpose, although we may be obliged to renew the application several times.

After the pulp of a temporary tooth has been destroyed we must bear in mind that absorption of the roots has been stopped, and when it is time for the permanent tooth to take its place, we must watch it closely and extract in season.

I should extract all ulcerated teeth and roots, but in extracting for the permanent teeth we must use judgment, keeping in mind the order of their normal eruption. 1st, central incisors; 2nd, lateral incisors; 3d, second bicuspid.

(This differs from the order given by most writers, they giving the first bicuspid before the second, but my experience leads me to think that the second bicuspid erupts first, in a majority of cases). 4th, first bicuspid, 5th canines.

The lower preceding the upper by a few weeks.

When, according to this order, it is time for the permanent teeth to erupt we should see the child often, and when a permanent tooth shows itself, which it will do if erupting outside the arch, or if inside we can feel it with an excavator, then extract the temporary tooth.

Under no circumstances extract a temporary tooth until there is ample evidence of the early appearance of its perma-

nent successor, unless the health or comfort of the child demands such extraction, lest by so doing we disfigure our patient for years.

I have among my patients a number above twenty-five years of age who are either carrying temporary teeth or have not erupted permanent ones where the temporary were extracted.

One lady who has a left superior temporary cuspid, on the right side has the space, the tooth having been extracted a number of years ago, she says, because it was a temporary tooth; another who has a second temporary molar; another who has no lateral incisors on the upper jaw, the temporary having been extracted and the permanent never having erupted which leaves the two spaces.

I have also seen two persons within a year over fifty years old who were erupting cuspids.

In writing this paper I have endeavored to show that it is our duty to use our best efforts in trying to save the deciduous teeth until the permanent teeth erupt, giving these reasons for so doing :

1. They should be saved for the health and comfort of the child.
2. By saving these teeth we are almost positive of obtaining a properly placed permanent set.
3. It is not an uncommon occurrence for a permanent tooth to remain dormant for years after the proper time for eruption.

VERMONT STATE DENTAL SOCIETY.

EXTRACTS FROM PRESIDENT J. P. PARKER'S ANNUAL ADDRESS.

I believe the office of president is not merely honorary, but that it should be coupled with diligent effort and untiring energy to elevate the standing of our society, not only in the minds of its members and the members of the dental profession at large, but of the people of this state and nation, that they may see and know that this society is doing a reforma-

tory work in the elevation and perfection of the operative skill of every member. * * *

This society should be a great power in breaking down the present obstacles to our mutual improvement by building up an enthusiasm among us, which should put aside any personal feelings, and so convince each disinterested man, whether in or out of the society, that he cannot afford to lose the benefits to be gained by attending each and every meeting. When a man absents himself from a dental meeting with the excuse of too much practice, he is doing himself as well as the society injury, and if he has competitors, he is showing himself cowardly in the extreme. A man is not imposing on his patients when he cancels his appointments for a few days to attend a dental meeting. By noting the date of such meetings beforehand we can usually arrange to be in our place from the commencement to the end. For my part, I want no better advertisement in a good intelligent community of my ability and conscientious practice than that I regularly attend dental meetings. * * *

I wish to draw attention to the paper read before this society one year ago by Dr. C. T. Stockwell, of Springfield, Mass., entitled, "Treatment and Filling of Root Canals at One Sitting."

Personally I have been much benefited by it. I have tested it by working according to that principle ever since, and with the greatest satisfaction. I have been successful in many cases I had considered hopeless with any other course of treatment, consequently I believe that when you all know the true worth of peroxide of hydrogen you will estimate its value no less than I do.

One year ago I did not consider it an antiseptic or a complete germicide, but at the present time I am inclined to believe that it is sufficiently so for all dental purposes: besides it does what, according to my experience, no other medicine will do, and this is to expel pus and debris when brought in contact with it. This virtue alone is sufficient reason why we can ill afford to do without it, in fact this is the very reason why it was called into use by dentists.

While other medicines will kill germ life they leave the carcass just where they destroy it, which, in my opinion, is a great obstruction to the completion of the operation. In using this as well as other medicines, its peculiar characteristics ought to be studied so that it may be properly and successfully applied; not that $H_2 O_2$ is any more difficult to apply than other medicaments, but on the contrary, it aids itself, and with proper manipulation will reach all parts and surfaces desired. Proper conveniences are necessary, such as pliers and cotton for the more superficial cavities, and an ordinary drop tube for more deep cavities and wide mouthed abscesses, also a good hypodermic syringe for the more inaccessible places, such as forcing through the apical foramen of the root and abscesses with fistulous openings.

Plenty of time should always be taken to give the $H_2 O_2$ sufficient opportunity to wash out all the causes of irritation, which it will do under favorable circumstances. Continuous applications should be made until all frothing and foaming ceases. In some cases it has taken me from one to two hours to complete the dressing of a badly abscessed tooth. I prefer that the abscess should have a fistulous opening. If there is no fistulous opening I usually make an incision with my probe or lancet in the gum directly against the root I am forcing the $H_2 O_2$ into. I do this in order to give the medicine ready escape when it comes in contact with the diseased matter, thus lessening the pain which otherwise would come. This method lessens the time of treatment also. When the $H_2 O_2$ follows through this channel without foaming, then I believe no further medicament is indicated, and the remainder of the operation is simply mechanical, for if the apical foramen of the root is hermetically sealed the operation is complete and success insured. I believe that anyone who thoroughly tests $H_2 O_2$ will have success if his case is a savable one.

The unstableness of $H_2 O_2$ is its worst feature, unless one is sufficiently acquainted with it to be able to tell when it is active, and when it has lost its power to act, he will very likely make failures with it and thereby lose confidence in the remedy.

To obtain and keep it fresh, I buy it in one pound bottles, as direct from the manufacturers as possible, and keep it in a cool dark place, opening only to fill a small bottle for my case once or twice a week as the occasion may require. In this way I can keep it fresh for six months.

IMPLANTATION.

Those of you who attended the New England Dental Society in Boston last October will remember that Dr. Younger, of San Francisco, gave a clinic upon his method of implanting teeth. While in San Francisco I had the opportunity of interviewing Dr. Younger on the subject, and have seen two cases where he has implanted teeth. I have also received the courtesy from him to attend some of his operations. * * *

An implanted tooth usually becomes firmly attached to its socket in from two to four weeks, and all soreness gone. After hearing Dr. Y. speak, and seeing the clinic in Boston, I could not believe the operation could be done successfully or with any degree of permanance, but after examining two cases here I must confess that I have a little hope, springing up which may grow into faith and confidence in the operation; it filled me with wonder to see nature, so restless and uncertain, accommodate herself to a foreign body so completely and with so much grace. * * *

Should implanted teeth prove lasting in a large percentage of cases, then Dr. Younger has been an aerial of light in bringing to the Dental Profession a revelation greater and more wonderful than all the other discoveries of the age.

CENTRAL DENTAL SOCIETY OF NEW JERSEY.

“MECHNAICAL DENTISTRY,” BY F. C. BARLOW, D.D.S.,
JERSEY CITY.

Read at the meeting of the Central Dental Society of New Jersey, April 18, 1887.

I shall call your attention to what are termed “cohesive surface plates” which I think were for the first time, as applied to

vulcanite dentures, introduced to the profession by Dr. Spyer at Asbury Park during the holding of our State Dental Society meetings.

I then recognized in a sense an old friend, but not as applied to rubber work, and saw several good reasons for their adoption.

1. Because of the cohesive tendencies it gave the plate.
2. For the opportunity it furnished for discarding the disfiguring and often misshapen chambers now in general use.
3. On account of its covering so much more surface, thereby insuring a more tenacious and firm hold, as well as leaving in a finished or polished condition by the mere removal of the thin metal plate, that portion of the rubber coming in contact with the palatal surface.

It did not appear, however, that as directed the plate could be attached to the cast with the liquid rubber cement in such a manner that it would produce or leave a perfect impression on the surface of the vulcanite plate; for in the packing, either from pressure on the flask, or even under the pressure of a warmed spatula, as worked by Dr. Spyer, it was quite certain that, although he presented some perfect work, the percentage of the imperfect would be by far the greater. So, after several trials none of which were satisfactory, I abandoned the form. Some time afterward, however, it occurred to me that a certainty could be obtained with no possibility of failure, and again taking the thing up I met with a good result.

My manner of procedure is to cut the plate as required and fit it to the impression, avoiding all crimping and doubling up by cutting out a V-shaped piece or pieces, and bringing the edges nicely together, pressing with great care so as not to bruise in the least the metal, thereby flattening out or crushing the cells or corrugations in the plate; also making sure that it touched the surface at every point. This being done, proceed to mix the plaster to the proper consistency and pour into the mould, which must be dry; and upon removal the metal plate or form will be found adhering to the model; a perfect die.

If the impression is oiled care, must be taken that none gets on the surface of the plate.

The plate can be removed or not, as one sees fit. With its retention until after vulcanization you have a glazed surface, without it the finish is what is termed a dead one.

When a wax impression is used, the plate will adhere without the aid of any cement, but if of plaster, rubber or any other fluid cement or varnish will answer the purpose for retaining it in position.

Dr. Spyer, in his circular of instructions, says: "For gold, platinum or other metal, coat palatal surface of plaster cast with liquid rubber, place cohesive surface form correspondingly cut in position on the cast, mould in sand, make three dies and counter dies and swage up the plate."

In my efforts to apply them to metal work I have not been successful, using the plates as now furnished us, and I do not think they can be used in that connection.

Following the directions, I have tried the casting of a die in different metals and alloys, getting good, sharp, smooth moulds, but when the die is run the surface presented is devoid of the sharp, clean cut projections one would expect to find from the perfect and clean appearance the mould presented; the figures in a great measure being indistinct and blurred.

This could be overcome by having dies for pressing the foil plates, cut with cells of a larger circumference and greater depth, but with the plates as now made an attempt is but a waste of time and patience. Applied to vulcanite as described, it is a good thing, yet would be of little or no value, even with the enlarged cells, as applied to metal plates other than of the continuous gum make, the unpleasant feeling experienced when the tongue comes in contact with the stippled-like surface, making it objectionable to the patient, besides leaving it with an unfinished look.

This principle was applied by me in the making of continuous gum dentures previous to 1872, fifteen years ago, the set which I exhibit being one of two pieces made in May, 1872, for a lady patient and worn for a number of years, and is still made use of in that class of work. It covers the advantages claimed by Dr. Spyer, together with other and equally important ones.

After swaging my plate I place it in the counter or female die, take a punch of such diameter as I may wish, and perforate the plate, either in regular or irregular lines, all over the platine surface and well onto the alveolar ridge. The punching of the holes creates a little depression, presenting a slightly concaved appearance, comparing somewhat with those produced by Dr. Spyer's method, or at least answering the same purpose, by obtaining the same results and more, as he obtains but one and I three. 1. I lighten the weight of the plate by the removal of so much material. This is of minor importance, however, as weight is no great detriment, if well-fitting and not bulky.

After the body is placed on the plate and it has been passed through the fire, it will be found, upon examination, that each one of the perforations has formed a smooth and glazed concave pit or cell, taking the place of and doing the work more effectively than the large vacuum commonly called an "air chamber." This is result No. 2. Lastly, naturally one would think that perforating the plate would tend to weaken it, but the effect is just the opposite, as it is stiffened and strengthened immeasurably, besides giving the enamel a secure hold on the plate by the aid of the somewhat torn or ragged edges of the perforations, caused by the punching out against the soft metal of which the female die is made.

REMARKS BY DR. STOCKTON.

MR. PRESIDENT: I am very glad indeed that one of our members has read a paper before this society. It is an anomaly. The society has a reputation, a considerable one, is known as a live society, almost overshadowing some of the greater ones of the greater cities, and this notoriety is due very largely to the excellent papers we have had; but those papers have been almost exclusively from gentlemen outside of the Central Dental Society. Therefore, I am very glad that one of our own members has read a paper here to-night. I do not know exactly the subject of the paper, but the title on the notice card, "Mechanical Dentistry," is the subject for discussion I take it.

So far as the particular subject of the paper is under discussion there is nothing special to say in regard to it, because he has covered the ground very well. Mechanical dentistry is a subject that deserves more attention than it is receiving. In all our societies, from the national down to the local, there is very little attention given to it; and yet mechanical dentistry is very largely practiced. I wish there was more attention given to it. I wish that the day would come when the people could be instructed more in regard to it, so that good dentistry would not have to contend as it does with the bad and the indifferent. To-day it is advertised everywhere in the daily papers that you can buy or procure sets of teeth for five dollars or ten dollars as good as can be made. The gullibility of the public is such that they do not know the difference; a set of teeth is a set of teeth, a dentist is a dentist, and they do not understand why they should pay twenty dollars for a set of teeth when they can buy them for five. If mechanical dentistry could be put upon a higher plane, and more attention paid to it, both the dentist and the public would be benefitted very materially. I am, therefore, very glad that this paper has been brought up to-night, and I wish it may be discussed by all.

I did not come here with the expectation of saying anything, and the only point that I care especially to speak of is the making of lower cases of metal. I do so whenever I can persuade my patient to have it. When gold and platinum are too expensive I use Weston's metal. I saw it suggested in the last number of that excellent journal, *THE ARCHIVES OF DENTISTRY*, in making gold or platinum plates to strike up the plate in two pieces, allowing one to overlap the other along the front. When there are six front teeth remaining in the mouth I strike my plate for the left side so that it will reach a little beyond the cuspid tooth on the right side, and strike the plate for the right side so as to reach the same point a little beyond the cuspid tooth on the left side. This gives you a double plate where strength is needed. Tack the pieces together, flow on twenty carat solder, and you get a solid

strong piece. It is also a good way to utilize your gold, for you do not require so large a piece as you would if the plate were struck from a single piece. Sometimes I put a little piece of gold wire around back of the front teeth, which makes the plate still stronger. This is the best way I know of to make a lower plate of gold or platinum. Sometimes it is well to let the plate run up a little on and around the cuspid teeth and then flow on solder around them. This answers every purpose of clasps.

Let me say now that it has been almost a universal custom here, when a paper has been read for the Chairman, to call for Dr. Atkinson, Dr. Stockton or some other gray head, and so it goes—not that I have been very abusive, or that Dr. Atkinson ever intends to be—but somehow or other the young men seem to have a fear that they will be criticised severely if they read or speak and they seem afraid to get on their feet and say what they think. That is not right. The younger members should say what they have to say without fear of anyone. We should have free and fearless discussion, and that is the only way to make the society what it should be. There are many here who are able to stand up and speak their thoughts and they should do it; unless you make a beginning you never will say anything. If you have an idea that you think may help and bless others, here is the place for you to let it see the light of day. Fear no man's criticism. Speak, and you shall be heard.

AMERICAN DENTAL ASSOCIATION.

CHICAGO, ILL., May 6, 1887.

Dr. George H. Cushing, Recording Secretary, American Dental Association.

DEAR SIR—Your letter of April 30, accompanied with a copy of a communication from Drs. W. C. Barrett and Frank Abbott making a protest against a proposed action of the officers of the association, looking to the postponement of the

regular annual meeting of the American Dental Association of the present year until 1888, and raising what they term a "point of order" as to the power of the officers under the constitution to do so; also your letter of more recent date with a statement of a vote upon the question submitted to the officers of the association, is received.

As the question raised had not occurred to me before, and the existing circumstances are of more than ordinary importance, I have thought it best to take such time to consider the subject as would enable me to reach a correct conclusion as to the power of the officers to change the time and place of the association's annual meeting, hence the delay in my reply.

It should be noticed that the gentlemen do not question the power of the officers to change the time and place of the meeting, provided the time is fixed within the year 1887.

The authority that the officers have (if such authority exists) to postpone the next annual meeting to 1888, is found in section two (2) of article four (4) of the constitution. So much of the article as in any way governs the question, and to which reference is made by the protestants, reads as follows:

"Time of meetings—The regular meetings of the association shall be held annually, and commence on the first Teusday in August. The place of meeting shall be determined each year by vote of the association.

"Sec. 2—The officers may, for extraordinary reasons, change the time and place of meeting upon the written consent of ten (10) of the fifteen (15) officers."

As Drs. Barrett and Abbott are not officers of the association, and have no right to vote upon the question at issue, or upon an appeal from any decision made, I could not see clearly how they could raise a point of order. The question, it seemed to me, (for the time being at least) was a matter that rested entirely with the officers of the association.

The point they raise is valuable, however, as it has suggested a more thoughtful consideration of the question as to whether the officers have the power to omit a regular annual meeting of the association, for if the regular meeting for this

year is postponed until 1888, the meeting of 1887 or that of 1888 would, of necessity, have to be omitted.

Upon a careful reading of the article referred to, I became satisfied that an honest construction of its meaning forbade the officers postponing the meeting until next year. But before giving this as my decision, I felt that I should take counsel with some one in whose opinion the association could rest with assured confidence.

With this idea in view, I placed the constitution of the association, and the protests of Drs. Barrett and Abbott in the hands of Ex-United States Senator Lyman Trumbull, and asked him to give me his written opinion upon the entire subject, which will be found in the following copy of a letter received from him :

CHICAGO, May 4, 1887.

Dr. W. W. Allport, President of the American Dental Association, Argyle Building, City.

DEAR SIR—The authority of the officers of the American Dental Association to dispense with the annual meeting is one of power under the constitution, and not a question of order as to the course of proceeding, which could only be raised by a member of the association in one of its meetings.

In my opinion a fair construction of article (4) of the association's constitution requires regular meetings of the association to be held annually, While section (2) of that article authorizes the officers, for extraordinary reasons, to change the time and place of meeting upon written consent of ten of the fifteen officers, I do not think it contemplated a repeal of the first section which required annual meetings to be held, but was intended rather to authorize a change of the time and place of holding the annual meeting. My conclusion is that the officers would not be authorized under the constitution to dispense altogether with the annual meeting.

Yours truly,

LYMAN TRUMBULL."

With the opinion of a gentleman of such large experience in, and accurate knowledge of, parliamentary proceedings, and

acknowledged standing as an able Constitutional lawyer, I must accept his interpretation, and decide that the officers of the Association have no power to omit an annual meeting, and therefore direct that the vote just taken be not recorded.

Very truly yours

W. W. ALLPORT, President.

SOUTHERN CALIFORNIA ODONTOLOGICAL SOCIETY.

The society meets four times a year in Los Angeles. The quarterly meetings last one day, while the annual meeting continues three days.

The society is not yet two years old. Its meetings grow in interest, the one just past being the best and most interesting and profitable to those in attendance.

The paper and clinic on Crown and Bridge Work by E. L. Townsend, D. D. S., contained many practical ideas and some new and valuable points, though I will only mention two, Townsend crown, for front teeth: it resembles an old-fashioned pivot tooth with a T pin baked into the base.

In mounting on a root the base of the crown is ground till it is of suitable length and the crown is then soldered to a gold cap band (with anchor pin attached) previously fitted to the root, and the completed crown is adjusted to root with cement. This style of crown makes a neat, strong and natural looking tooth and has the advantage of simplicity. I hope these crowns will soon be placed on sale in the depots.

For the rapid manufacture of solid cusps for gold crowns Dr. Townsend devised a set of dies cast out of brass, 12 dies all in one plate containing all sizes of molars and bicuspid.

To make the cusps of crown, a piece of annealed gold plate of proper size is laid on the depression of the desired crown, a piece of lead size of a cherry placed on the gold, strike the lead a heavy blow, and the gold will be made to conform to the brass die and form a perfect cusp—melt solder into the

concave surface and you have a solid gold cusp—which, when soldered to the band previously fitted to the root and then cemented in place makes one of the most substantial crowns yet devised by man. This crown can be made and mounted inside of 30 minutes, as was proved at the clinic.

R. H. Shoemaker, D. D. S., formerly of Philadelphia, demonstrated the use of the electric mallet and cohesive gold in a contour filling. At a former meeting the Herbst method had been shown by the writer.

The night session was devoted to an address on "Reminiscences of Transplanting and Replanting Teeth," by G. R. Thomas, D. D. S., formerly of Detroit, now retired from practice.

Dr. Thomas had a great deal of experience ten years ago, and gave a very interesting and instructive address. The reader will find the doctor's views of the subject in 1878 by looking in Vol. 20 of *Dental Cosmos*, page 377. He was then as enthusiastic as Dr. Younger, and up to that time had far more experience.

It was four years before his cases began to fail, and then they came thick and fast.

The article in February *Cosmos* by Dr. Weld expresses Dr. Thomas's experience so exactly that it is not necessary to repeat here, and yet Dr. Thomas says there are cases where transplantation or implantation is advisable and the best thing under the circumstances. See article referred to in *Cosmos* in 1878 of transplanted tooth, tooth out of mouth one month—cut off end $\frac{1}{8}$ inch—filed down sides and polished the root, taking off all the pericementum, and then placed into socket of extracted root. After 10 years' use it appears as good as new and cannot be distinguished from the other teeth.

In the doctor's experience of transplanting he found that teeth with pericementum scraped off and root polished up on the lathe did just as well as when the root covering was not disturbed. He had over five hundred cases, five years was the average life of a transplanted tooth.

Dr. Thomas is an honorary member of the society, and takes a deep interest in its welfare.

Two cases of implantation exhibited—both looked well though only in for six weeks.

The dentists of Southern California are making more money speculating in real estate than out of the profession. Our new dental law compels every man entering the profession to either present a diploma to or stand an examination before a State Board of Dental Examiners.

Our next meeting will be on the first Tuesday in July, 1887.

More anon, J. C. McCoy.

KANSAS STATE DENTAL ASSOCIATION.

The meeting of the Kansas State Dental Association held at Topeka, April 27, 28, 29, was an exceedingly interesting session, all of the prominent members of the profession in the state being present. The young blood was well represented, and even the "Coyote districts" sent in their representatives. Home talent predominated so that no restraint was felt by members in the discussions. In this state of prohibition and woman's suffrage, ideas were not lacking nor words to express them. Several papers were read from non-resident members of the society; among these was one from Dr. W. C. Barrett, of Buffalo, N. Y., entitled "Tin and Gold as a Material for Filling Teeth." A. Morsman, M.D., D.D.S., of Omaha, contributed "An Eclectic Clinic." Both papers were discussed pro and con, developing the fact that tin and gold had long been in use as a filling material and that the practice was an old one.

Dr. Morsman's paper demonstrated the necessity of a thorough knowledge of all methods and materials to become a first-class all-round operator.

Poetry, too held a place in the proceedings. "A Dream" was the title of a poem contributed by Mrs. Ella Allerton, of Hiawatha.

Dr. Henry W. Howe's clinic, "A Piece of Bridge Work," demonstrating the use of the Knapp oxyhydrogen blow-pipe, continued during the entire session and was a marked feature

of the occasion. Then there were "Gold Filling with Electric Mallet," Dr. L. C. Wasson, Ottawa, Kan.; "The 'Low' Crown," Dr. L. M. Mathews, Lawrence, Kan.; "Cement Filling," Dr. A. H. Thompson, Topeka, Kan.; "Porcelain Crown," Dr. W. H. Schulze, Atchison, Kan.; "Amalgam Filling, Demonstrating the use of his Combined Saliva Ejector and Warm Air Injector," Dr. H. W. Parsons, Wamego, Kan.; "Gold Filling," Dr. John R. Boyd, Leavenworth, Kan., and several others not on the programme.

Dr. Pearson, of Kansas City—everyone knows Pearson—was present with as fine a display of dental goods as were ever seen.

Dr. H. W. Parson, of Wamego, Kan., read a paper entitled "Amalgam," which showed careful study of the subject and contained many points useful to the dentist, but left the subject where it has ever been in the "dark."

The subject of dental legislation was introduced and discussed, showing the workings of our dental law, which has proven very satisfactory. With very few exceptions dentists have complied with its provisions. There has been one prosecution under the law and the victim paid his fine "folded his tent and silently stole away." The law is a good one for all concerned, but there are a few, and of a class from whom one looks for better things who consider it in the light of a protection to the dentist only, enabling him to keep down competition and thereby charging larger fees for his operations.

Kansas dentists average well; while we have the best, both in theory and practice, we have some of the worst, but the latter are becoming fewer and fewer each year. Their previous lack of advantages being in a measure atoned for by their attendance at our yearly meetings. Long live our State Dental Association, may it grow and prosper. C. B. G.

THE STATE DENTAL SOCIETY OF MAINE will hold its annual meeting at Waterville, commencing on July 19 next. A good meeting is expected.

CONNECTICUT VALLEY DENTAL SOCIETY.

The innovation adopted this year by the Connecticut Valley Dental Society of going into Canada to hold their semi-annual meeting will prove to be of great benefit to the profession at large. The reports already received indicate a large attendance from the States, while the profession in Montreal are already quite enthusiastic over the meeting. Among the feast of good things provided are papers by Prof. G. V. Black, of Chicago; Prof. Chas. Mayr, of Springfield, and Prof. R. R. Andrews, of Cambridge; the latter's to be illustrated with the steropticon. Part of their innovation will be to combine business and pleasure, and the programme will be arranged with this end in view.

Opportunities will be given to visit the various points of interest in and about the city, including the famous sail down the Lachine Rapids, while excursions at reduced rates will be arranged to Quebec, Montmorency Falls and to the Saguenay, also to Ottawa.

The Windsor Hotel will reduce their rates to \$3 and \$3.50 per day to those attending the meeting. Round trip tickets from Springfield will be \$12; the rates from other points can not be announced until July. A cordial invitation is extended to the profession, and a special request is made to each one to bring his wife with him. If those who intend going will correspond with the secretary, Dr. Geo. A. Maxfield, Holyoke, Mass., they will obviate much trouble for themselves in regard to rooms at hotel, etc.

The meeting is to be in July, commencing on Tuesday, 19th.
G. A. M.

TENNESSEE DENTAL ASSOCIATION.

The Tennessee Dental Association will hold its next annual meeting in Clarksville, beginning on the second Tuesday in July next, and continuing for three days.

There has been ample arrangements made for clinics in all

the advanced departments of the profession. The practical demonstration of all new features in dentistry will be made by experts of known ability.

It is expected that every live, pushing dentist in the state will be present and will contribute something to what is expected to be the best meeting ever held in the state.

H. E. BEACH,
President.

J. R. STUBBLEFIELD,
Rec. Secretary.

CENTRAL DENTAL SOCIETY OF NEW JERSEY.

EDITOR ARCHIVES—The Central Dental Society enjoyed a delightful time last evening, the occasion being the seventh anniversary of its existence, and was celebrated at the Park House by a dinner. A large number of invited guests were present, among whom may be mentioned Drs. Atkinson, Rich, Kingsley, Northrope, Dwinelle and Walker, of New York, and Dr. Bonwill, of Philadelphia.

After justice had been done in converting the viands into pabulum, Dr. Watkins, the president, welcomed all in a very neat speech, and hoped the occasion would long be remembered as a social event in their lives. He then proposed a toast "The New York State Society," and called on N. W. Kingsley, who gracefully responded, saying, this state society was composed principally of dentists, but they had a few M. D.'s to give dignity to their associates. He said the late meeting of the society was memorable for three things :

1. It was graced by the presence of ladies.
2. A delegation from New Jersey lent additional charms by their good looks and exquisite attention to the ladies, and he regretted the absence of one whose grandiloquent tones always charmed him.
3. The meeting was presided over by Kingsley—and these three things would make it memorable.

He also said that the New York State Society proposed next year to give the grandest banquet ever given by any society, and all are invited.

Dr. Bonwill responded for the Odontological of Philadelphia and regretted they were not so enterprising as other societies. It is a little singular that the Philadelphia brethren have never returned the many courtesies extended them by the New York friends. Nobody ever remembers to have been invited to a Philadelphia spread.

The First District Society of New York was responded for by its president, Dr. Walker.

The president called out Dr. Stockton to respond for the New Jersey State Society.

"The American dentist, a thinking man, a wise man, a generous man," brought Atkinson to his feet, and he said if a dentist is all that he should be to practice dentistry he is fit to associate with the nobility.

"Dental Reminiscences" was pleasantly responded to by Dr. John B. Rich. The changes wrought, have been simply marvelous. He remembered fifty years of active practice. There was a time when such a meeting as this was simply impossible. The social element was a thing unknown in early years of dentistry. He was glad it was so no more, for the social element was a great factor in education. Dentistry now had become so broad that it was impossible for it to be a specialty.

Thus closed a most delightful evening, and one that will tend to foster good fellowship and dental progress for many a time to come.

CENTRAL.

EFFECT OF MENTAL OVERWORK UPON THE TEETH.—Among the hard-worked pupils of the Paris public schools the teeth become deteriorated in a few weeks after entry. The second dentition is often premature. These observations confirm the statements of Dr. J. L. Williams, who has given great attention to this subject. He has shown that any mental strain shows itself upon the teeth in a short time, both in increased decay as well as in increased sensibility of the dentine. Dr. D. M. Parker has reported that these same changes are always apparent in men who are training for athletic trials.—*Boston Medical and Surgical Journal*.

EDITORIAL.

MISSOURI STATE DENTAL ASSOCIATION.

PRELIMINARY ANNOUNCEMENT.

The Executive Committee of the Missouri State Dental Association will issue the programme of the coming meeting about June 1. Persons wishing to secure a programme should address Dr. D. J. McMillen, Chairman Executive Committee, 720 Main St., Kansas City.

The President hands us a partially completed programme sent him by the Executive committee, Drs. McMillen, Aiken and Hungerford, of Kansas City.

Papers will be read by the following: Dr. Shepard, Sedalia; Prof. Eames, St. Louis, "Implantation;" Dr. I. P. Wilson, Burlington, Iowa, "Cases in Practice;" Dr. G. A. Bowman, St. Louis, "Practical Points in Dentistry;" Dr. John G. Harper, St. Louis, "Immediate Filling of Pulpless Roots;" Dr. R. Wood Brown, Kansas City; Dr. J. D. Patterson, Kansas City; Dr. A. H. Thompson, Topeka, Kansas; Dr. Shattuck, Kansas City; Dr. T. M. Nicholson, Fayette, Mo; Dr. Henry Fisher, St. Louis, "Extraction;" Thomas Conrad, M. D., New York, "Fracture of the Lower Jaw and the Dental Splint;" Dr. J. B. Newby, St. Louis, "Suggestions on the Treatment of Children's Teeth;" Dr. A. H. Fuller, St. Louis, "Report on New Appliances;" Dr. Wm. N. Morrison, St. Louis, "Opening Pulp Canals;" Dr. William Conrad, President's Annual Address. Dr. A. E. Baldwin, of Chicago, will open the discussion on Dr. Harper's paper.

Clinics will be given by the following: Prof. W. H. Eames, "Implantation;" Dr. C. J. Tibbets, Quincy, Ills., "Gold Contour Filling, Bonwill Mallet and Engine;" Dr. Garber, Tipton,

Iowa, "Gold Contour Filling, using Perry's Separators and Mallet;" Dr. J. W. Wick, St. Louis, "Gold Contour Filling, Hand Mallet, doing his own Malleting;" Dr Swop, Booneville; Dr. Goodrich, Wentsville; Dr. A J. Prosser, St. Louis; Dr. G. P. Holmes, St. Louis; Dr. Bowman, St. Louis, "Herbst Method;" Dr. B. Q. Stevens, Hannibal, "Filling Root Canals with Orange Wood Points;" Dr. Howe, Lawrence, "Bridge Work;" Dr. Geo. Staples, Sherman, Tex; Dr. Fisher, "Gold Cylinder Fillings;" Drs. H. W. and F. M. Shriver, Glenwood, Iowa, "Practical Case of Bridge work;" Dr. Newby, "Gold Crown;" Dr. Morrison, "Regulating Appliances;" Dr. William Conrad, "The Immediate Filling of any Pulpless Root and a Porcelain Crown;" Dr. C. C. Carroll, Meadville, Pa., "Aluminum Cast Base, Practical Case, Crowns and Bridges, by the Use of which all other Patents for Crowns and Bridges are evaded.

Dr. Price, of Weston, Supervisor of Clinics, will have entire charge of the Association during the clinical operations, and there will be nothing to prevent this part of the meeting from being both pleasant and instructive.

The indications are that this meeting will exceed in interest and usefulness any held in 1887.

A number of Illinois, Iowa and Kansas dentists have promised to attend and also some from more distant points.

Remember the *place* and date, Kansas City, June 21 to 24, inclusive. Reduced rail road rates have been secured.

Persons buying rail road tickets, can, on demand, receive a receipt from the agent selling the ticket acknowledging payment of full fare; this should not be neglected. This receipt contains a blank for the Secretary of the Association to fill out, certifying that Dr. ——— has been in attendance, etc., and is entitled to return at one-third fare.

Come one, come all.



A Russian journal reports a case of syphilitic infection from a razor in a barber shop.

AMERICAN DENTAL ASSOCIATION.

The following letters have been sent us in time for the present issue, in response to our request for an expression of opinion regarding the advisability of changing the time and place of holding the coming meeting of the American Dental Association. There seems to be a general feeling among the profession that there are "extraordinary reasons" at the present time for changing the place and time of holding the next annual meeting of the American Dental Association, and as suggested by Dr. L. C. Ingersoll in his letter, Washington City would seem to be the most appropriate and convenient place, and the week immediately preceding, or following the meeting of the International Medical Congress, the most appropriate time. The Southern Dental Association meets at Old Point Comfort the week preceding the International Congress, by changing the time to the week following the congress it would not interfere with the Southern and those desiring to attend the three meetings could do so at a small outlay of time and expense. We believe the change will add to the interest and attendance of each of these important gatherings.

NEWARK, N. J., May 24, 1887.

MY DEAR DR. EAMES—I think it will be better for the American Dental Association to postpone the time to a nearer time of the Medical Congress, so that those attending the one could come back to the other, with not so long a time between. Asheville as good as any place. Yours,

C. S. STOCKTON,

BOSTON, MASS., May 24, 1887.

MY DEAR DOCTOR—I am in favor of changing time and place so as to suit those who attend International Medical Congress.

Fraternally,

GEO. F. EAMES.

SPRINGFIELD, MASS., May 22, 1887.

DEAR DOCTOR—Yours of May 20 at hand and contents noted.

In regard to change of time and place of holding the next meeting of the American Dental Association so as to suit the convenience of those who wish to attend the meeting of the International Congress also, I am of the opinion that it would be a wise thing to do. Had the officers the power to postpone this year's meeting altogether it seems to me that it would be a still wiser course. But if that can not be done the time and place may, perhaps, be so changed as to avoid any seeming conflict of mutual interests. Why not have both meetings at Washington?

Yours in haste,

C. T. STOCKWELL.

BURLINGTON IOWA, May 16, 1886.

EDITOR ARCHIVES—The meetings of the American Dental Association in August at Asheville, N. C., the International Medical Congress at Washington, D. C., in September, and the National Association of Dental Faculties sometime during the summer, remind us that much time and expense will be required of the individual members of the profession who are desirous of attending all those important meetings. So far as I am personally concerned, I do not feel that I can afford to miss any of them, nor can I well afford to attend them all.

The two former are so widely apart as to time and place that attendance upon both seems almost out of question. Would it not be well, therefore, that the meeting of the Dental Faculties should take place at Washington about the time of the meeting of the International Medical Congress, and that the meeting of the American Dental Association be postponed for this year, or, what would probably be better, convene at Washington in September, transact necessary business, electing officers, etc., and then adjourn until next year.

With a desire that nothing be done that will in any way tend to disorganization of this important association, I remain very truly yours,

I. P. WILSON, D.D.S.,

LA CROSSE, WIS, May 22, 1887.

Extraordinary and sufficient reasons *do exist* in the minds of members of the American Dental Association and other den-

tists of this section who have given any thought to the contemplated change of time and place of meeting this year. The International Congress will be the one meeting attended this summer and unless the American Dental Association can be brought near enough to it to avoid unnecessary loss of time and expense it will suffer as no loyal, honest supporter of that organization will care to see it.

On the other hand, the proposed change affords an extraordinary opportunity to gather in additional members from all parts of the country, secure better transportation and other rates and assured success. Let the change be made.

E. PALMER.

VICTIM OF A BRUTAL ASSAULT.

Dr. Edgar Palmer, one of our State editors, was the victim of a sad experience recently. We publish the item as a note of warning to those who are in the habit of charging strangers of like services. A young woman called upon the doctor and asked to have her teeth examined. The service was rendered and a fee of one dollar paid under protest. The evening of the same day the doctor was summoned to the door by the bell, and on opening it was brutally assaulted for refusing to return the dollar paid him for the services rendered the morning patient.

The following extract from a personal letter tells the balance of the story in the doctor's own words :

Three men came to the house after 10 o'clock Wednesday night, two stood guard each side of the house and the third after demanding and being refused the return of the dollar, attacked me with a slung shot. The second blow felled me senseless, the third and fourth struck me on the head, cutting my forehead and scalp in ghastly wounds.

The provocation was simply that I insisted having payment for time given in consultation and examination at the request of a stranger and "shopper" who was one of that class of im-

posters none of us care to see at all, and I for one intend they *shall pay* me if I give them any attention, even at the risk of a broken head, but if this is to be expected when a professional man charges for such service, who is safe? I am getting along nicely. PALMER.

It is our practice to charge for such service and believe it to be a duty we owe to the profession and ourselves to have our patients understand the value of the service rendered and that they are expected to pay for it.

It is time the public was informed upon this point. It has been the practice with a large portion of the profession to render this and similar service free of charge, quite too long. The public fully recognize that no other specialist is expected to render *any* service free. Why should the dentist? Is his time and service of no value? Just in proportion as the public understand that the dentist's time and opinion is worth something and must be paid for, just in that proportion will he be elevated in the estimation of a community.

INTERNATIONAL MEDICAL CONGRESS AND AMERICAN DENTAL ASSOCIATION.

The meeting of the International Medical Congress early in September is the event of the year in every scientific and professional aspect. Its magnitude is imposing, and when we consider that the leading men in that assemblage are the leading men in all the world in the different branches of medical and allied sciences, it becomes a question of no small importance to every member of the dental profession who contemplates participating in any manner in the proceedings of that distinguished body, whether he can afford to allow any thing to stand in the way of his attendance. The many who belong to the American Dental Association will doubtless desire to attend both the association and the congress, but will seriously consider whether they can afford the time and the money to make two long journeys to gratify the desire, and

will, in all probability, decide upon attending only the Congress. This will leave only a minority to attend the meeting of the American Dental Association at Asheville.

If the Association could be held in Washington City during the last days of the week preceding the meeting of the Congress, I think a full attendance could be secured at the expense of only one journey, with the additional expense of a few days of hotel charges; and I might add that the change of time and place suggested would probably secure the attendance upon the meeting of dentists from Europe. I think that the change I have suggested is desirable.

L. C. INGERSOLL.

"THE FACTS IN THE CASE."

The editor and publisher of the *Western Dental Journal* "seem" to imply that the recording secretary of the Missouri State Dental Association had intentionally neglected to send them a notice of the coming meeting of said association. This is not true. It is the duty of the ex-committee to issue notices of meetings. "Suffice it to say that" a member of the ex-committee "is also associate editor of the" *Western Dental Journal*.

In proof of their assertions a number of notices as they appeared in other journals are reproduced. These notices were not sent to the journals by the recording secretary, but by the president, with the knowledge and consent of the recording secretary; that the *Western Dental Journal* did not get a notice was not a *neglect of duty* on the part of the recording secretary as can be seen by the following from the constitution:

"SEC. 2. The Executive Committee shall appoint essayists, *issue notices of meetings*,¹ secure room or place of holding meetings, and such other duties as pertain to this office."

The recording secretary being also associate editor of this journal deems it proper to show that he has not been "so

¹Italics ours.

lacking in sense of duty as to use an official position of a public nature for business purposes or as a means of venting personal spleen."

The above quotation "seems" to be intended for the writer, but as he has no "business purposes" to further by the use of his "official position," nor any "personal spleen" to vent, it therefore must be intended for some other officer. H.

MISSISSIPPI STATE DENTAL ASSOCIATION.

The Mississippi State Dental Association held its twelfth annual meeting in Meridian, beginning May 17, and continuing three days,

The subject matter of the President's address was the status of dentistry and its relations to the medical profession, claiming that it is a learned profession and a branch of the healing art. A number of valuable papers were read on various subjects. Dr. J. G. McCulloch's paper on "The Value of Microcopy in Dentistry" was conceded to be a very able paper. The doctor exhibited some sections prepared especially for the association.

This society has made rapid strides in the last four years, and the transactions compare favorably with some of the older states. The next annual meeting will be held at Grenada the third Tuesday in May, 1888.

MORGAN ADAMS.

PUBLISHER'S NOTICE.

Subscriptions begin with the January and July numbers. Those wishing to give the ARCHIVES a half year's trial can do so now by sending the publisher one dollar. Those desiring to procure the volume complete for 1887, should subscribe immediately as there remain but a limited quantity of the back numbers. Also those in arrears should remit *at once*.

ANOTHER LINK IN THE CHAIN OF DENTAL
EDUCATION.

A dental department to the Southern Medical College of Atlanta, Ga., has just been established. An able faculty has been selected who will furnish the college with an excellent outfit in all departments.

Prof. L. D. Carpenter is dean and may be addressed for further information at 47¹/₂ Whitehall street, Atlanta, Ga. It is to be hoped that this school will meet with success, as a good dental college has an elevating influence upon the profession, in the surrounding territory, and this elevation keeps up the college, the benefits being mutual.

BRIEF MENTION.

CROWDED OUT.—Several communications and reports of dental meetings which should have appeared in this issue have been left out for want of space. We beg the indulgence of our contributors for the delay.

• DR. J. H. MARTINDALE, Minneapolis, state editor of the ARCHIVES OF DENTISTRY for Minn., sails for Europe some time during this month, for health and recreation. We commend him to our professional brothers across the water. Any courtesy extended to him will be duly appreciated by the ARCHIVES with which he is favorably connected.

THE BOARD OF REGISTRATION in dentistry of Massachusetts, recently appointed by the governor has organized and already held several meetings. Their work is, we understand, well "underway" and circulars will soon be issued to the practicing dentists throughout the state. Dr. L. D. Shepard, of Boston, is president of the board and Dr. E. V. McLeod, of New Bedford, its secretary.

EVERY MAN has two educations—that which is given to him, and the one which he gives to himself. Of the two, the latter is by far the more valuable.

TO CLEANSE STAINS FROM TEETH.—Take pulv. pumice mixed with 4% solution per oxide hydrogen, polish the teeth with the mixture, afterwards rinse with pure water. It will do its work in a few minutes, and will not injure the teeth.—A.

ANCHORAGE.—When anchorage cannot be made in a cavity, if it is large enough, partially fill with some of the plastics, and before it sets, insert one or more platinum pins from old artificial teeth, and you will have good anchorage. If the pins are too long they can be dressed off with the filling.—A.

SAND PAPER FILE.—Take a piece of wood three-quarters of an inch square. Slit one end with a fine saw to the depth of two inches. Make a hole and insert a screw so as to tighten the slit. The hole through the first half should be large enough for the screw to pass through easily. Cut sand paper in strips the width of the stick, insert one end in the slit, fasten it by turning the screw, turn the sand paper back on the stick and use it as a file. If one side of the stick be rounded like the ball of the thumb, it will suit better for polishing lingual surfaces.—A.

“ALMOST EVERYONE,” says Friend Barrett of the *Independent*, ‘can enjoy a good joke, even if it is at some one’s else expense, and the *Western Dental Journal* makes an especially good point on ARCHIVES OF DENTISTRY, apropos to the fifty editors and forty-three sub-editors or correspondents of the latter, when it intimates that ARCHIVES is publishing its subscription list upon the title page.” Certainly! and the ARCHIVES enjoys this practical joke as much as our contemporaries. Our “novel scheme” is working satisfactorily, and we can afford to have our friends call attention to it even though it be jocosely. Keep it up, gentlemen; we will take it kindly, in the spirit in which it is given. Those of our contemporaries who appreciate the “joke,” will please observe that we have added a few more names to our “subscription list.” See title page for June.

NOTHING BUT WIND in the cloud which Friend Pearson of the *Western Dental Journal* has raised in his publisher's column for May, under the title, "Facts in the Case." Those who know Dr. Pearson as a most worthy member of the I. O. G. S., recognize that no consideration could induce him, or any loyal member of the ancient order, to "attempt to gain a little cheap" favor among the members of the Missouri State Dental Association, at the expense of another member of the order. Bro. P. will not intentionally violate the unalterable code which binds its members to hang together. No; not even to serve his pet, the *Journal*. The object of the little tilt the *Western Dental Journal* and ARCHIVES OF DENTISTRY have been indulging in with reference to the meeting of the M. S. D. A. has been solely to awaken an interest in the meeting for the good of the profession of our state; having accomplished the end sought we will join hands and attend the feast at Kansas City on the 21st to 24th of this month which the M. S. D. A. offers to the profession of the state and expect to have a royal good time. We expect Dr. Patterson (who, according to the records of the association, was elected member of the ex-committee for the present year) to join us and hope if he is honored with any office in the gift of the association he will accept and perform the duties as we believe he will. We have been led to make the above exposé to prevent any misconception on the part of the readers of the journals in regard to the status of affairs in Missouri. All is peace.

DIED.—We are pained to learn of the death of Miss Flora C. Stugiss, daughter of our old friend Dr. S. M. Stugiss, of Quincy, Ill., who died May —, aged 23. She was possessed of all the attributes of a noble woman, and was loved and esteemed by all who knew her. Our sympathy goes out to the afflicted in their sad bereavement.

MARRIED.—ALBERT E. NICHOLS, D.D.S., to Miss JESSIE JENNIE HOWARD, Tuesday evening, June 7, Los Angeles, Cal. Dr. Nichols was one of the recent graduates of the Missouri Dental College; a young man of promise. We tender him and his bride our congratulations and best wishes. May success attend them along the rugged pathway of life.

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To the Dental Profession.

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In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

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Respectfully yours,

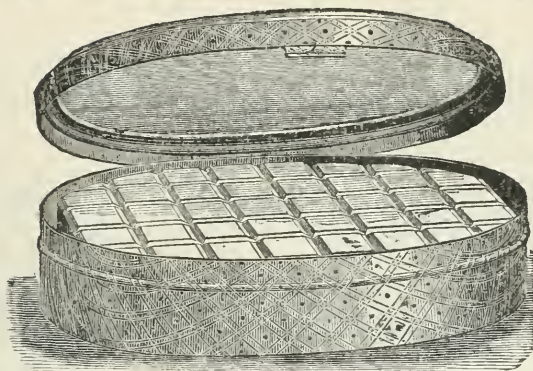
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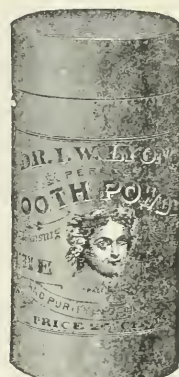
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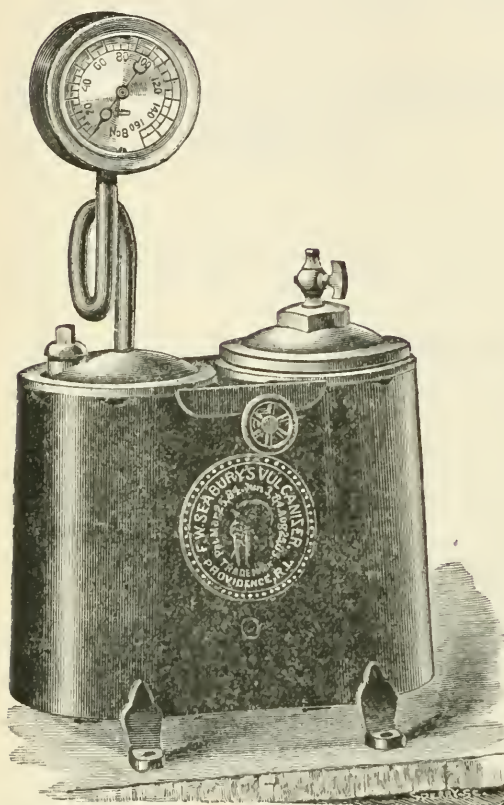
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TO THE PROFESSION.

DEAR DOCTOR:

As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondents, as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

The ARCHIVES is not in the least degree controled by any association or dental supply house, but independent and published in the interest of the entire profession. The price is reduced from \$3.00 \$2.00 per year. Those of our present subscribers who have already remitted \$3.00 for this year will have \$1.00 credited on next year's subscription without they otherwise direct. To those that have discontinued or are not now subscribers, we solicit them to sign blank below and mail to us early.

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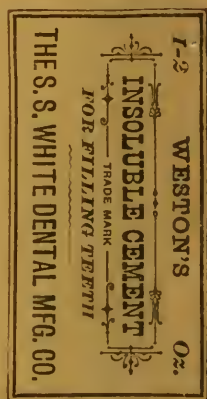
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THE Archives of Dentistry.

A MONTHLY RECORD OF DENTAL SCIENCE AND ART.

VOL. IV., No. 7.]

JULY, 1887.

[NEW SERIES.

ORIGINAL ARTICLES.

CERTAINLY IT IS EXCELLENT DISCIPLINE FOR AN AUTHOR TO FEEL THAT HE MUST SAY ALL HE HAS TO SAY IN THE FEWEST POSSIBLE WORDS, OR HIS READER IS SURE TO SKIP THEM; AND IN THE PLAINEST POSSIBLE WORDS, OR HIS READER WILL CERTAINLY MISUNDERSTAND THEM. GENERALLY, ALSO, A DOWNRIGHT FACT MAY BE TOLD IN A PLAIN WAY; AND WE WANT DOWNRIGHT FACTS AT PRESENT MORE THAN ANYTHING ELSE.—*Ruskin.*

MAKING INFORMATION AVAILABLE.

BY WM. BARKER, D.D.S., PROVIDENCE, R. I.

Owing to the stringent demands upon time and the organs of sight, our reading should be largely for the sake of obtaining information if we would keep abreast of the progress of the day. If our memories could retain all the lore thus furnished we might soon become "walking cyclopedias;" but we cannot remember all we would and at the same time forget all that is undesirable. Forgetting is a valuable art, but one which perhaps few of us have occasion to cultivate, as proficiency in this direction might imply unfitness in the other; so we resort to various aids to adjust the balance. We study what we would fix upon the memory, using all its powers to make the impression enduring, and when emergency demands its use, find the information has slipped into some crevice beyond immediate call.

To the busy dentist who cannot command the leisure, or spare the nerve-force for keeping up regular habits of study, a system of note taking will make available much rich material, that, by a sole reliance upon memory, would be virtually lost. Experience teaches most of us that it is useless to expect the memory to yield up its stores of information at short or even long notice without some aid—some reminder. A slight suggestion often becomes the key which unlocks chambers long since closed and forgotten.

Lull'd in the countless chambers of the brain,
Our thoughts are linked by many a hidden chain;
Awake but one, and lo! what myriads rise!
Each stamps its image as the other flies.

A method of note taking which I have found very convenient and satisfactory in its practical results, consists, in outfit, of a reporter's note book and stylographic pen or pencil. This style of book with a morocco cover from which it can be removed when full and another substituted constitutes a "vade mecum" which insures its use and availability. Devote the first five or six pages to an index of subjects arranged alphabetically, the remainder numbered in regular order.

The "plant" being now ready let us proceed "to make a note of it." Something particularly apt, original or important attracts your attention; you draw your book and pencil, and enter in the first blank space thus: Pericementitis—Archives—Vol. 4, p. 21; or, Replantation—Cosmos—Vol. 21, p. 48—In cases where the book is your property or available at any time for reference. When such is not the case it is my habit to write out either a verbatim or epitomized note of the matter according to circumstances. Nothing further is necessary but to index the entry to prevent confusion in future entries on the same subject and make it readily accessible.

Such note-taking will be found of great value, for not only is the habit good by enabling one to "separate the wheat from the chaff," but the concentrating information into such a "bird's-eye view" renders it available at any time, and the

trouble will be found very inconsiderable when once the plan is established; indeed my sincere regret is that I had not done so long before I did.

MOVABLE BRIDGE WORK.

BY J. HARDMAN, MUSCATINE, IOWA.

In the ordinary stationary bridge used in lieu of base plates for artificial dentures there are two serious objections:

1. A difficulty in many cases to keep the piece tidy or clean.
2. The graver one, that of great difficulty in repair, remodeling, etc.

In the movable bridge these objections are overcome, and all the desirable features of stationary bridge work fully retained.

The best plan we have tried (and one quite efficient in any case) is as follows:

Attach no part of the bridge to the piers with a cement, but merely by clamps and collars. These clamps or collars which are a part of the bridge, or superstructure, are to fit (in general cases) over the gold shell or crown (which is the substructure) and resting upon a pier-foot or projection made at the base of the crown-shell, supporting the piece securely under masticating pressure.

To secure the stability of the work where the teeth crowns used as piers are tapering, a retaining clamp-nipple should be placed on the crown-shell at a point near the end, and just over the place where the clamp rests; so that in its adjustment the clamp will spring over it and be tightly retained in position. In a small piece one retaining nipple or key will be sufficient, but in larger cases two may be required on as many different teeth.

In preparing shell-crowns or any other form of pier that has a metal crown or collar, it is quite an easy matter to solder on

the foot-projections near or at the base border, using small pieces of platinum for the purpose. And the retaining nipple is readily put in by drilling a small hole where it is determined to have it placed; put into this hole a small piece of platinum wire or plate, and fuse about it some gold, and dress and trim to shape; also dress off the inside projection.

A bridge of this kind may also be made and comfortably worn where nothing but nude teeth are used for piers. In such cases to guard against the bridge settling upon the gums a pin or two is inserted into the tooth near the neck, as a pier-support for the clamp to rest upon, and also a retaining pin can be placed in the same, just over where the end of the clamp rests.

We can assure you where a piece is constructed upon this movable plan the intelligent wearer will highly appreciate the superiority. He will readily remove it after a meal to cleanse it, or lay it by at night, and to facilitate any ablution or treatment of a diseased or parched mouth.

And where accident or wear has disabled any part and repair is indispensable, the perplexity attending the stationary variety is simply horrible, while, however, in this portable fixture the whole process of repair is reduced to a minimum.

The constructor of dental mechanism should study well all probable sequel requirements. Not to do so is as faulty in a dentist as a non-provision of retreat in warfare would be in a military chieftain. No matter how complete the accomplishment of a case, experience fully proves it to be but temporary, and in more ways than we can anticipate it will be rendered liable to repair.

CLEANLINESS IS NEXT TO GODLINESS.

BY H. B. VAN DORN.

Reading "Personal Habits of Dentists" in the May number of ARCHIVES reminded me of an article upon cleanliness in the office, published in one of the dental journals during the

past winter, in which a word of caution was given dentists in regard to placing their fingers in the mouths of patients advising them, as they valued their reputation, to cover the fingers with a napkin or a fold of linen. What a sad commentary upon the habits of the modern dentist that such advice should be deemed necessary.

The following case, recently related to me by a gentleman, a whilom patient, seems so *apropos* to the subject that I can not refrain from stating it. While having a tooth operated upon in a neighboring city, the dentist placed his fingers, without the protecting napkin—and not over clean—into his (the patient's) mouth as often as occasion required; and not only this, but he seized every opportunity to take a "puff" from a cigar which was placed conveniently at hand. Is it necessary to add the patient was thoroughly disgusted? And this occurred in a city from which is promulgated the most advanced ideas in dentistry. Truly, there is always missionary work close at home.

The subject is one that could be enlarged upon to almost any extent, but it is needless, since a word is often enough to point a moral, if not to adorn a tale.

ALUMINUM.

BY GEO. H. SWIFT, D.D.S., MANCHESTER, VT.

As aluminum is very seldom referred to in any of our dental journals as a base for artificial dentures, perhaps a word in regard to it may not be amiss. I shall not at this time attempt to give any explicit directions as to the manner of working it for it is not materially different from making other swaged plates. Having had some experience in the use of it for a few years past, I am led to entertain a very favorable opinion of it, and I believe we may confidently assure our patients that it will, if pure, be fairly durable in the mouth, and will keep it healthy and comfortable. The early use of it was not alto-

gether satisfactory, as traces of iron were often present to that extent that when subjected to the action of the fluids of the mouth, plates would sometimes be eaten full of holes, or be like a honeycomb. This, however, was more generally the case with cast plates, which were not only more difficult to make, but were not as good. Aluminum is not very easy to cast, as it does not flow freely like most other metals, and the contraction when it cools is very considerable, thus cracking the teeth or blocks so badly as to render this method very uncertain. When made from rolled plate and pure material, aluminum for upper cases has proved very satisfactory in my hands, and not being very expensive is also a matter for consideration; for we often have patients who cannot quite afford the expense of gold, but yet want something better than rubber, and I have found that aluminum more nearly supplies this want than any other material. It is very light and strong, perfectly tasteless and odorless, and there seems to be no reason why it should not be as healthy for the mouth as gold or platina. The teeth are best attached with rubber, and if done in the manner described in the February number of the ARCHIVES, they will be perfectly secure.

THE DIET OF STRONG MEN.—The Roman soldiers who built such wonderful roads, and carried a weight of armor and luggage that would crush the average farm hand, lived on coarse brown bread and sour wine. They were temperate in diet, and regular and constant in exercise. The Spanish peasant works every day, and dances half the night, yet eats only his black bread, onion, and watermelon. The Smyrna porter eats only a little fruit and some olives, yet he walks off with his load of hundred pounds. The coolie, fed on rice, is more active and can endure more than the negro fed on fat meat. The heavy work of the world is not done by men who eat the greatest quantity. Moderation in diet seems to be the prerequisite of endurance.—*Selected.*

SOCIETIES.

DENTAL EDUCATION.

BY R. Y. HENLEY, D. D. S., ATLANTA, GA.

Read before the Georgia State Dental Association, Cumberland Island, May 24, 1887

The question under consideration is one that has been written and talked about so much that the mention of it impresses us that it is the same old story that we have heard so often and so long, and one so well worn that it has become threadbare, and yet when we think of it seriously, we feel that it is a subject which should never grow old, and which should be ever fresh and dear to the mind and heart of every loyal member of our noble profession.

The time has come when this question should be treated more seriously than ever before, because of the many obstacles and conflicting opinions which confront us on every hand. We are united in the conviction that we need a higher standard of dental education, and as a result of that need, the country and the profession is flooded with artisans unskilled, who cannot make a decent amalgam filling, nor distinguish atrophy from caries, to say nothing of diagnosing pathological conditions of the mouth and teeth and their therapeutic treatment. This, to some extent, is due to the fact that many of our institutions of learning have admitted men within their walls who more properly should be in our common schools learning the elements of an English education. Let our colleges subject men to preliminary examinations, and if they cannot give evidence of proficiency, refuse to admit them. This requisite, I am happy to say, has been adopted by many of our schools, and to-day the class of men that are being admitted to our

ranks are such as we may rest assured will ever bear aloft our banner and stand shoulder to shoulder with us in advancing the interests of our profession.

It is with pride that we can claim that no profession known to the annals of history has made such rapid strides as that of dentistry, and it is with unmingled surprise that we hear men say that the standard of dentistry is being lowered every year. I admit that we have a few colleges that bring reproach upon the profession by graduating incompetent men, but to a large majority of our institutions are we indebted for the exalted position of our profession to-day. Need I speak of the method of instruction in our colleges, or the relationship which dentistry sustains to the great healing art, medicine? It would seem not, as fifty years or more should have been time sufficient to enable us to have established a curriculum, but several articles in some of our leading journals, which have recently come under our observation, warn us that a more decided stand must be taken than ever before, for the citadel of our institutions is being attacked. New ideas, like new remedies, are constantly crowding in upon us, and that we may show the spirit of progress, we must weigh them, accepting what good they may have and discarding whatever element they may possess that will impede the wheels of our advancement. As to the method of instruction there seems to be a diversity of opinion. While some favor separate schools, there are others who insist on dental departments of medical colleges, and there is still another class who are clamoring for a medical education and then a practical course in a dental infirmary. Of this latter class I may be allowed to say that like angel visits, the adherents are few and far between. In thinking of them I am reminded of the unfortunate man who had been imbibing at the shrine of Bacchus, and laid him down to sleep in a cemetery, but on awaking concluded that the day of judgment had come, and in his dilemma exclaimed that he had either risen too soon or else they had all gone and left him. I am free to admit that dentistry is a specialty of medicine, but because it is, let us not be extreme and think

that it is all medicine and no dentistry. We admit that medicine is the mother of dentistry, but who will assert that the mother of an offspring is the offspring itself?

In a paper by Dr. Hopkinson, of Baltimore, which was read before the Maryland State Dental Association in February last, we find the following language, viz., "Now, as a matter of course, a man cannot properly be a practitioner of medicine or any department thereof, unless he bears the distinctive degree of M. D., and a man is not in the fullest sense a specialist in medicine unless he has legally been made a doctor thereof." According to this theory the honored degree of D. D. S. bears with it no significance. If dentistry is a specialty of medicine at all it is in the fullest sense, and if the men who have obtained the degree of D. D. S. are specialists of medicine at all, they are in the fullest sense of the degree which they hold, no more, no less. According to the logic of our esteemed brother no man can be a dentist unless he has M. D. attached to his name. I would like to know in what light he viewed himself after he obtained the degree of D. D. S. and before he obtained the degree of M. D. This I understand is the position taken by the class of men who favor graduation in medicine, and then a course in a dental infirmary to learn practical dentistry. It is true that the physician, surgeon and dentist necessarily have many duties in common, but each has a clearly defined and distinctive sphere. The physician is a specialist in view of the fact, that although he treats diseases which affect the whole body to a greater or less extent, his treatment is restricted to hygiene and materia medica, but there are pathological conditions which baffle the skill of the most eminent of their fraternity. The surgeon is a specialist in the true sense of the term, notwithstanding the fact that there are but few who practice surgery to the exclusion of medicine. He differs from the physician in the fact that his work is largely mechanical. Put a young man in one of our medical colleges, let him take the degree of M. D., and leave him in a dental infirmary for one year and I am bold to assert that he is not prepared to practice dentistry. Take the lectures

of our most highly educated scientific medical men and tell me how much they teach us of dental pathology and therapeutics. These branches cover a class of diseases and operations which have not been taught in our medical schools and do not come under the treatment of the physician or surgeon, and which to manage with the degree of success which they demand, require instruction which no other class of operations call for and which our medical colleges can never impart. That the degree of M. D. is of great and inestimable value to the dentist is not questioned, but the degree of D. D. S. is of greater value to him. For the benefit of those who claim that the degree of D. D. S. is of no value and carries with it no weight, I would like to know how much more significance the degree of M.D. carries with it? The man holding the former from a dental college of acknowledged standing, is *prima facie* evidence that he is qualified to enter our profession while the possession of the latter is no evidence that he is in any respect qualified to practice dentistry although he may have received the highest medical education in one of our foremost schools of medicine. Take the men who are graduates of medicine and whose diploma entitles them to entrance in the senior class of our dental colleges, and with all of their knowledge of medicine, as a rule, they obtain the degree of D. D. S. on a much lower vote from the faculties of our institutions, than the men who have been in attendance upon the lectures for two sessions. If this be true, which cannot be successfully denied, what, I ask, would be the qualification of the man who has graduated in medicine, and spent one year in a dental infirmary, where he hears no lectures on dental pathology and therapeutics, and where he can only learn to fill teeth and make plates? Could we call him a dentist and admit him to our ranks? Most assuredly not.

Of such an one I would ask, which would he practically be, a dentist or a physician? To those who claim that there is no other method by which the standard of dental education can be elevated, allow me to say that instead of advancing, they are lowering the standard, by manufacturing mechanics, who not

having had the opportunity to learn the value of the dental organism, nor the weighty responsibility which rests upon us to preserve those organs which nature has given no recuperative power can not and will not put a higher estimate on them, than that of the fees which such mechanism will bring. I do not make this assertion with a desire to disparage, nor to reflect upon the honesty of such men, but to make good the indisputable claim that no man can appreciate as he should, that which he has never been educated to know the value of, and when we get a class of men on the public, who measure their services by the fee, it is then that the dignity of the profession is lowered, and it becomes merely a question of barter. We are free to admit and claim that we should have a compensation commensurate to *some extent* with the operation performed, but that should be secondary. The desire to relieve the suffering of a sin-cursed and fallen race predominant. What is grander and nobler than a man whose great object in life is to do something that will alleviate the sufferings of his fellow creatures, and leave in the footprints of time, the evidence that he has contributed something to the advancement of science, that will be of advantage to succeeding generations.

ILLINOIS STATE DENTAL SOCIETY.

The Illinois State Dental Society held its twenty-third annual meeting at Jacksonville, May 10 to 13. The meeting was not up to the average of the society in interest, perhaps, due to the fact that practical dentistry was given a minor position.

The first session was opened with prayer by Rev. A. B. Morey. At the first roll call about 40 members were present. This number was increased to 60 by arrivals during the session. The reports of the officers showed the society to be in a flourishing condition.

Dr. W. T. Magill delivered the president's address. He lamented the fact that of about 900 dentists in Illinois, so

small a proportion were in the society. He was decided in the opinion that school children should be taught the value of the teeth and the proper care of them by a series of lectures given each year, by a competent person.

The address of welcome was delivered by Mr. John W. Springer, and his remarks were appropriately responded to by the society's president. Dr. Norman J. Roberts, of Waukegan, sent a paper "Regulating Appliances," which was read by the assistant secretary and the discussion opened by Dr. Talbot, who was followed by Drs. Black, Newkirk, Noyes, Stevens, Gardner, Sitherwood, Reed and McKellops.

The regular business of the second day was opened with Dr. Swasey's report as chairman of the committee on "Dental Art and Inventions."

Next in order was a paper on "Retention of Pulpless Teeth in the Jaws," by Dr. H. Judd. In his absence the paper was read by Dr. G. H. Cushing. The discussion was opened by Dr. H. H. Townsend, followed by Drs. J. S. Marshall, L. Ottofy, Koch and A. W. Freeman, Sturgis, Sitherwood and Black.

During the afternoon two committees were appointed, one of three members to prepare a brief history of the society to be presented at its twenty-fifth anniversary, two years from date; the other to make preparations for holding the meeting at that time upon a boat on the Mississippi river.

The discussion of Dr. Judd's paper was resumed. Several spoke and Dr. C. R. E. Koch read part of the paper prepared by Dr. M. L. Hanaford.

During the evening session the following papers were read and discussed: "Dental Science and Literature," Dr. C. R. E. Koch; "Medical Stimulants," Dr. L. C. Ingersoll, followed by Dr. A. W. Harlan's report as chairman of the Committee on Practical Therapeutics.

Thursday morning was devoted to clinics.

Dr. L. Ottofy implanted a tooth, Dr. W. B. Ames operated for pyorrhea alveolaris, applying electricity, Dr. I. P. Wilson made a contour, filling with extra-cohesive gold foil; Dr. J.

W. Davis extracted teeth, using the electric vibrator, and Dr. W. P. Richards filled a cavity with crystal gold.

During the afternoon the report of the committee on clinics was made by Dr. C. F. Matteson, of Chicago. The committee had examined three of the operations performed last year, and all were in a good condition.

This was followed by a discussion on "Operative dentistry," opened by Dr. E. Noyes. It was followed by Drs. E. J. Greene, W. A. Freeman, A. W. Harlan, Brophy, G. D. Sitherwood, L. C. Ingersoll, H. H. Townsend, Black and others.

At the opening of the evening session Dr. Black made a motion that a special invitation be extended to Dr. William Conrad, as president of the Missouri State Dental Association, to take part in the discussions. The motion was adopted. The paper of the evening was by Dr. W. N. Morrison, "Operative Dentistry as Applied to Deciduous Teeth." The discussion was opened by Dr. K. B. Davis, followed by Drs. Brophy, Newkirk, Noyes, Green, Ottofy, Harland, Reid and J. W. Davis.

The last day's session was opened by Dr. T. W. Brophy, who read a paper on "Diagnosis of Oral Tumors." Dr. G. V. Black opened the discussion of the paper, and was followed by Dr. Chapell and Dr. E. E. Cady.

Dr. L. L. Davis, "The Use of the Microscope in Progressive Dentistry." Discussion of the paper was opened by Dr. T. L. Gilmer, followed by others.

The election of officers resulted as follows :

Dr. C. B. Rohland, of Alton, president ; Dr. Charles Henry, of Jacksonville, vice-president ; Dr. G. Newkirk, of Chicago, secretary ; Dr. T. W. Pritchett, of White Hall, treasurer, and Dr. W. B. Ames, of Chicago, librarian. Dr. Carmony, of Mt. Vernon, was elected member of the executive committee, and Dr. W. P. Richards, of Englewood, supervisor of clinics.

During each session Dr. Black was given an hour in which micro-organisms were illustrated and discussed.

On account of his distinguished services to the profession Dr. Black, of Jacksonville, was made a life member, and his annual dues remitted to him.

After selecting Cairo as the place for holding the next meeting, which will be convened May 2, 1888, the convention adjourned.

IOWA STATE DENTAL SOCIETY.

The Iowa State Dental Society held its twenty fifth annual meeting at Cedar Rapids, commencing at 10:30 a. m. May 3. The president, Dr. L. E. Rogers, Attumwa, called the meeting to order, and introduced his Honor, the Mayor, Mr. C. W. Eaton, who gave the society a cordial welcome and proffered the hospitality of the City of Cedar Rapids—promising on the part of her citizens that everything should be done to make this visit of the dentists a pleasant and profitable one.

Dr. R. L. Cochran, of Burlington, responded to the Mayor's Welcome, as follows:

Mayor Eaton, to you and the citizens of Cedar Rapids, I wish to extend thanks for your hospitality. Your hotels are open to us, your hearts are open to us. We have met nothing but good humor from your people. The whole city and each individual citizen has "welcome" written all over their faces. Cedar Rapids, the home of industry and knowledge—its very name indicates to us hospitality.

We are not here to make fat our pocket-books, but to improve our knowledge. Work is our watchword.

You may be satisfied you have welcomed to your city a body of intelligent men. We will come to your city again, but not next year. Again I thank you for the cordial welcome of your city. Until we come again we will hold in our mind the live, the progressive, the hospitable city of Cedar Rapids.

Dr. Rogers, President, in his annual address, gave a brief review of the work done by the society during the past twenty-five years, and offered some practical suggestions regarding the work to be done in the future. He said: "Our last meeting was a very great success, and to make this one an improve-

ment over that of last year we must work. We welcome the young men to our association. To be a successful dentist one must work. A dentist is not, like a poet, "born, not made." One must have patience and perseverance, honesty and mechanical genius to become a successful dentist. Honesty is very much to be desired in a dentist—honesty to himself, honesty to his patients. He must be skillful and industrious.

I am much pleased with the plan of having the Executive Committee select the essayists.

I am also glad that the Vice-President has been made superintendent of clinics.

I would advise the publication of our proceedings. If the minutes of our meetings are put in pamphlet form all the dentists of the state will have the benefit of them."

The society acted upon the suggestion to publish the proceedings in pamphlet form, by voting to publish an anniversary volume, which should embrace the proceedings of last year and this, together with the minutes of preceding years—commencing with the organization of the society in 186. An assessment to meet the expense was voted, and a committee appointed to take charge of the publication.

Prof. L. C. Ingersoll, of Keokuk, occupied the time of the first evening in a public address on "Dental Ethics." (Among other good things to which he gave utterance) he said:

"Some young men start out like young game cocks to fight their way to fame. What does such a man think of a code of ethics? It is right for a young dentist to say I will. No society can make a code of ethics, they can announce or adopt one. The code of ethics is ingrafted in the very nature of a good, honest man. Ethics is a synonyme for moral character.

What is the idea of a profession? Those who associate together to improve themselves, to advance the interests of that pursuit in which they are engaged constitute a profession. The origin of the profession is no modern idea. There have been professions since away back in antiquity. And such things are necessities. We of the dental profession are dependent upon others for many of the comforts of life. There is a type

of the professional man, and he is a well-dressed man. It will not do for a dentist to wear the clothes suitable for a ditch-digger; if he does he will not get practice.

The professions have an historical development and are the outgrowth of the benevolent elements in human nature. From the religious element has come all the professions. The ancient priest was the religious teacher, the lawyer and the doctor, simply because of his superior intelligence. Hence, these are called the learned professions. Education is the foundation of the professions. It used to be thought that a farmer and a mechanic need have no education. That is changed and it seems now that a professional man does not need an education. I hope the day will come when no man will be admitted to a profession until he has graduated from a literary institution.

Many men enter the profession to make money, leaving out the idea of honor and of honesty.

Talk as we will about the elevation of the dental profession it will never take place until its members adopt a high ethical code. The capital of a dentist is brain, thought, not money. As soon as one oversteps the bounds of truthfulness people lose confidence in him. We want no quack advertising in the dental profession. No dentist has a business to warrant or guarantee. Don't talk about your competitor; you have no business to have one save in excellence.

The time of the four days sessions was fully occupied with the reading of papers, discussions and clinics—no time was wasted, as is frequently the case at these annual meetings. The members of the Iowa Dental Society are eminently workers. We do not remember of ever attending a meeting where so much good work was done as at this.

The noticeable feature of this meeting was the clinics. Dr. Baird, of Burlington, Superintendent of Clinics, by special effort succeeded in securing representative men in the different departments of our art to give clinics at this meeting, and as a result all methods of filling teeth from the old non-cohesive cylinder to the latest method of using the cohesive heavy

foils was practically demonstrated. Electric, pneumatic, automatic and hand mallets of various patterns were exhibited practically and their merits fully set forth. The various methods of constructing bridge and crown work was fully demonstrated; in fact, we know of nothing new in the line of operative or prosthetic dentistry that was not brought out in the clinics at this meeting.

Much credit is due to Dr. Baird for the manner in which he performed the duties of the office of Superintendent of Clinics.

The officers for the ensuing year are as follows:

Presidents—Dr. W. P. Dickenson, Dubuque.

Vice-President and Superintendent of Clinics—Prof. A. O. Hunt, Iowa City.

Secretary—Dr. J. B. Montfort, Fairfield.

Treasurer—Dr. F. S. Kulp, Muscatine.

The next annual meeting will be held at Iowa City. The society meets at Iowa City every other year. SCRIBE.

THE CONNECTICUT VALLEY DENTAL SOCIETY.

The Connecticut Valley Dental Society extend a cordial invitation to the profession to attend their semi-annual meeting at Windsor Hotel, Montreal, Canada, July 19 to 22, inclusive. Reduced rates over railroads as follows: Round trip to Montreal from all stations on Grand Trunk Railroad for one and one-third fares. Vermont Central Railroad free return tickets to all stations on their roads in Vermont. Over Connecticut River Railroad, round trip, from Springfield, \$12; Northampton and Greenfield, \$11.50; Brattleboro, \$10.75; Bellows Falls, \$10. Parties coming from New York and all points South of Springfield will buy regular ticket to Springfield and excursion from there making cost of round trip from New York \$17.44. From Boston get regular excursion ticket, \$16. Tickets over Connecticut River Rail-

road good to return till August 13. Hotel rates reduced to \$3 and \$3.50 per day. Among the various excursions arranged from Montreal, one to Quebec, round trip, \$3.34; to the Sagueny visiting Ha Ha Bay and Chicotimi, \$13.34.

Each one is requested to bring his wife with him. The Dental Association in Montreal will do all in their power to make our visit a pleasant one, and have chartered a steamer for a trip through the Lachine Rapids; also carriages, that we may visit the various points of interest in and about the city.

At this season of the year the hotels are crowded, and in order to secure rooms notice must be sent to the Secretary as early as possible.

Holyoke, Mass.

GEO. A. MAXFIELD,

Secretary.

AMERICAN DENTAL ASSOCIATION.

CHICAGO, June 25, 1887.

All railroads West of Chicago, and from Chicago leading to Niagara Falls will carry members and delegates of the American Dental Association at one and one-third fares.

READ THE RULES CAREFULLY.

"Each delegate must purchase a first-class ticket to the place of meeting for which he will pay the regular fare, and upon request the ticket agent will issue to him a certificate of such purchase.

If through tickets cannot be procured at the starting point delegates will purchase to the most convenient point where such through tickets can be obtained, and re-purchase through to place of meeting, requesting a certificate from the ticket agent at the point where the re-purchase is made.

Tickets for the return journey will be sold by the ticket agent at place of meeting at one-third the highest limited fare, only to those holding certificates signed by the ticket agent and countersigned by the secretary or clerk of the convention, certifying that the holder has been in attendance upon the convention."

Tickets are good, going, three days before the meeting and returning, three days after its termination.

A. W. HARLAN,

Chairman Executive Committee,

P. S. Equally favorable rates are expected from the South and East.

NATIONAL ASSOCIATION OF DENTAL FACULTIES.

CINCINNATI, O., June 27, 1887.

The National Association of Dental Faculties will meet at the Ebbitt House in Washington, D. C., on Saturday, September 3, 1887, at 10 o'clock a. m.

By order of the Executive Committee.

H. A. SMITH,

Secretary.

C. N. PEIRCE,

President.

OFFICERS OF MISSOURI STATE DENTAL ASSOCIATION FOR 1887-8.

President—William N. Morrison, St. Louis.

First Vice-President—T. M. Nicholson, Fayette.

Second Vice-President—Jas. F. McWilliams, Mexico.

Recording Secretary—John G. Harper, 516 Walnut street, St. Louis, Mo.

Corresponding Secretary—William Conrad, Hotel Beers, St. Louis, Mo.

Treasurer—James A. Price, Weston.

Executive Committee—J. P. Gray, W. M. Carter, Sedalia ; A. C. Griggs, Warrensburg.

Board of Censors—A. H. Thompson, Topeka, Kan. ; J. B. Newby, St. Louis ; John G. Hollingsworth, Platt City.

Committee on Ethics—D. J. McMillen, Kansas City ; G. L. Shepard, Sedalia ; R. R. Vaughan, Louisiana.

Publication Committee—G. A. Bowman, W. H. Eames, A. H. Fuller, St. Louis.

Committee on Law—James A. Price, Weston.

MINNESOTA STATE BOARD OF DENTAL EXAMINERS.

The Minnesota State Board of Dental Examiners will meet in Minneapolis at Nicollet House at 9 A. M., Tuesday, July 12, 1887 (the day preceding the session of the Minnesota State Dental Society.

C. W. MERRY, Secretary,
Stillwater, Minn.

NATIONAL ASSOCIATION OF DENTAL EXAMINERS.

ORANGE, N. J., June 21, 1887.

The annual meeting of the National Association of Dental Examiners will be held at Niagara Falls on Monday, August 1, 1887, at 3 p. m.

FRED. A. LEVY,
Secretary.

MASSACHUSETTS DENTAL SOCIETY.

NEWARK, N. J., June 14, 1887.

I had the pleasure of attending the twenty-third semi-annual meeting of the Massachusetts Dental Society, held in Boston Junn 9 and 10. I was much disappointed at not meeting the New England editor of the ARCHIVES.

This society is composed of a fine set of men, earnest in their zeal for the advancement of dental science, and a desire to know all the new that may conduce to their own or to their patients' welfare.

The early part of the session was devoted to routine busi-

ness which, under the excellent management of the efficient executive committee, was soon gotten through with.

President Hitchcock occupied the chair and was efficient as a presiding officer.

The first paper read was by Dr. F. G. Wait on "Administering Ether." He spoke of the difficulty existing in regard to suitable apparatus for administering ether. Many appliances are difficult to clean and unwholesome to use. In giving ether the patient should be seen several days before and instructed as to diet and time of taking the ether. Patients should be kept in a reclining position and well under the influence of the drug.

Dr. A. M. Dudley, of Salem, then introduced Dr. G. O. Rogers who had practiced dentistry in China for several years, and he gave a very interesting account of what he saw and learned concerning dentistry as practiced by the Chinese dentist. He expressed the idea prevalent that teeth could be loosened by the application of powder upon the gum and also that toothache arose from the presence of worms. The dentist always very carefully concealing his instruments and giving the whole apparent effect to the powder. And just before the close of the operation he skilfully introduced two or three dead worms into the patient's mouth to confirm the sufferer as to the supposed cause of his pain. The doctor witnessed several operations but could not get at the bottom of the worm and powder mystery until he had bribed a dentist to disclose the facts. All were very much interested in the talk of the doctor.

In the evening Dr. C. S. Stockton, who was the guest of the society and was warmly welcomed, read a paper on "Dentistry and Its Relationship to Medicine."

There is, he said, a criminality attached to incompetence. Our aim should be to discover the best methods of doing quickly and painlessly what in the past has been a slow torture.

Just as medicine has advanced from blistering and bleeding to truer science and milder power, so our effort should be. It

is for us to study our work on a tooth with as much forethought as that experienced by the cutter on the diamond. And while we seek the best processes, let us learn reverence for our work. How sublime is the work of restoring an organ to its usefulness. What is the work of an artist compared with ours—the restoration of a painting or a fresco, or the rebuilding of a palace? Consider the dignity of saving an organ as honorable as the saving of life. Think of the power possessed by the dentist to banish pessimism and bring back happiness. Milton never could have written "Paradise Lost," nor Tennyson have composed "In Memoriam," nor Gladstone have raised his voice so eloquently, had not they all first masticated and digested good English beef, requiring jaws in good repair. Think of how much has been done in late years towards removing pain by anæsthetics and in this blessed means of relief the dentist has a noble share. We do as noble a work for man, as that done by him, who clears away from the buried Apollo the clinging dust of Roman soil. Remember it is our high prerogative to restore speech when that has been lost, owing to the absence of the teeth. Science is ever going forward, discovering new and newer means for repairing our frames, for relieving human suffering, and it is our privilege to co-operate in these achievements.

As dentists we should know something of chemistry, of physiology, of laws of digestion, of anatomy and surgery. The man who knows no more than his own specialty does not and cannot know that thoroughly. The dentist ought to know more about the human body than that which is merely implied by a knowledge of the teeth. The more a man knows the wiser and better qualified is he to practice dentistry. The relationship of dentistry and medicine is a very intimate one.

The next paper was by Dr. H. C. Meriam, of Salem, on "Materials and Methods." He called attention to a number of objectionable practices that now disturbed the relationship of dentists with dental manufacturers. In one case a dental chair had been withheld for years, in spite of its superior usefulness. In New York one of the dental societies had sur-

rendered "body and science" to a firm and held its meetings in its parlors, excluding rival exhibitors.

The dealers seemed to have formed a combine with the aim of declaring what firms dentists ought to apply to, and what goods should be ordered by them. They were perfectly right in this, that is if dentistry were merely a trade and dentists merely tooth carpenters. But if dentistry was a beneficent profession and they were its practitioners, then the practice was wrong from its foundation.

The dentist could not do with honor that which would disgrace a doctor.

Dr. C. C. Carroll, of Meadville, Pa., gave a very interesting clinic with his successful method of casting aluminum plates, and also showing its superior qualities for crown and bridge work.

Dr. J. M. Crowell interested the convention very much in his successful manner of enameling crowns, showing that 18-karat gold even will successfully receive the enamel.

A communication was read from the First District Society of New York urging all to contribute to a fund for the carrying on the suit of appeal against the "Tooth Crown Company," and a generous response was at once made.

This closed a most successful and enjoyable meeting.

CENTRAL.

AMERICAN DENTAL ASSOCIATION.

CHANGE OF PLACE OF MEETING.

The twenty-seventh annual meeting of the American Dental Association will be held at Niagara Falls, commencing Tuesday, August 2, 1887.

GEO. H. CUSHING,
Recording Secretary.

MANY would come to wisdom if they did not think themselves already there.

BACON.

EDITORIAL.

The formal recognition by the American Medical Association, of dentistry (properly accredited) as a specialty of medicine may be considered as the beginning of the end of a hard and bitterly fought battle, and as the highest possible compliment that could be paid to the dental profession.

When the most distinguished representatives of so great a profession, with a naturally profound and jealous veneration for medical and surgical eminence believe it to be the proper thing to extend an official recognition of equality to the dental profession—an out-cast from birth, thrown entirely upon her own resources, able to claim no parentage but among quacks and charlatans, nourished only through channels of her own making, attaining no position but through the influences of her own demands and a sleepless effort for perfection—it means that the dental profession has attained a position in the eyes of the world more than worthy to receive such a recognition; it means that the honor of being acknowledged as one of the many specialties of medicine is at least balanced by the honor she confers.

Let us hope that a proper realization of our position will prompt a manly and dignified reply, worthy of a great, a free and an independent profession. Let us hope that the dental representation at the coming International Medical Congress be fully in keeping with our highest attainments, and that this most proper recognition of our merits—which will doubtless be ratified there—will ultimately redound in mutual benefit to all; that bonds of closer relation, though the influence of allowed inter-communication, bring a higher appreciation of the positive work and needs of the other, and a more perfect understand-

ing of that somewhat limited branch of our science where the two professions touch and intermingle.

To dentistry especially will it be a benefit, if, through this influence a more thorough college curriculum is established, resulting, as it must, in higher graduating attainments.

MALLETS AND MALLETING.

Under the above heading Dr. Salamon in the April number of the *Review*, besides giving a very good history of the introduction and progress made in the use of the mallet, makes some good suggestions, indulging also in some speculation regarding the best mallet to use, which leads me to add a word to his subject.

I cannot really take issue with him, from his leaning toward the electric mallet, for he previously states, "Had I any influence I should use it in the direction towards making it obligatory at the colleges to use the hand-mallet only; any one who understands the use of the hand-mallet thoroughly may, in after practice, become accustomed to almost any mallet he may choose." This is sound doctrine, and I am satisfied very few would adopt the "cold-blooded" blow of any automatic invention, or the fussy electric device when they had fully and rightly learned to use the hand-mallet. Among the many useful hints I have received from successful operators, no suggestion or demonstration has added more to my stock of practical knowledge than that given me in 1870 by Dr. C. R. Butler, in the proper use of the hand-mallet. A large per cent. of those who try to use the mallet never think of learning the left hand to do the work, but go at it as a stone-cutter does his rock, simply because they will not overcome the unnatural conditions, even when there is so much to be gained by it. Dr. Butler told me it would cost me a year's struggle to familiarize the practice. It did, and so it will be with you; but it will be a victory worth all the sacrifice, and settle for-

ever in your mind, as it has in mine, the best system of malleting for any and all operations requiring its use.

To what extent the profession at the present day are divided into "factions" regarding the use of soft gold-foil by hand pressure or cohesive gold and the mallet it is difficult to determine, but of this I feel quite certain the former is not "on the decline," or the latter "steadily increasing."

Many of us who learned to make serviceable gold fillings without the dam and mallet, drifted with the tide of popular sentiment and became extremists in the latter method, but time and the results of such practice have greatly modified both sentiment and manipulation, and while cohesive gold and the mallet are "working wonders" in their place, non-cohesive gold, and gold and tin are saving more natural teeth to-day than at any time during the last decade, and will continue to be used by those who endeavor to bestow *the best service* demanded by the masses.

But why discuss old methods and materials when here comes a circular announcing "Plastic Gold" that will "stick to the tooth," "requires no retaining points," "easily worked as amalgam" and "only one burnisher required to fill and finish a filling," and is certified to by an M. D., D. D. S. of New Jersey, who says: "Jealous manufacturers of old-fashioned gold or makers of costly instruments to use with old-fashioned gold, etc., etc., their vocation must go." "Simple," "effective" and "beautiful" "long-felt want," come to my arms! you surely must be the one thing needful to fill an aching void.

E. P.

WAKE UP!

The following advice to physicians given in an editorial in the *American Medical Journal*, would surely benefit some dentists if lived up to. P.

"There are thousands of men in this world who have a name only to live, but are dead—dead to the world and to all man -

kind, except it be to only a few who, through the busy din of life happen to stumble upon them. They identify themselves with nothing; they plod the silent paths of darkness and obscurity, as if they had no object in life, no good to accomplish, no purpose in their being. They drop their bodies in the dust, and but few know of their death because they were not identified with the living and active, and their loss creates not even a ripple upon the placid surface of waters.

"But," says the reader of this note, "what has this to do with the medical profession?" It has every thing to do. Do you not know that there are thousands of physicians in this country who have lost their identity?

Go travel over the country, as I have done, and you will find a doctor here and there whom you have never heard of before.

He has never written a word for a medical journal, never been identified with any county, state or national association; never even become acquainted with his neighbor physicians, except that some kick or cuff has brought him to his senses. His whereabouts is unknown. Why?

Because he has lost his identity. He has become indifferent to himself and to his own interests, and cares but little for the interests of others.

I would not want to live by any profession and isolate myself in this way.

Let the profession know where you live. Be an allopath, a homœopath, an eclectic; be something, identify yourself with the society in which you live at home, and at large. Join your county society; if none, make one. Join your State Medical Society and pay your dues promptly, for it will pay you in the end. Identify yourself with the National Association, and you will be rewarded. Take at least one medical journal. Write an article though short and broken it be—at least sign your name and address to a postal card, and let it be known that you live. Move and have a name. By so doing you may obtain an enviable position and a legitimate reputation that will do you good and live long after you are dead.

A FRACTURED TOOTH.

The article on "A Fractured Tooth" in the January number (ARCHIVES) brings to mind a case in practice of somewhat similar nature, which occurred some seven years ago; but, unlike "H," I have seen the case regularly since then, and though it has experienced very hard service for that length of time, it is still "there."

The case as presented was a lad of about 12 years of age, who by a fall upon the ice had sustained a fracture of the right superior central incisor. The line of fracture was almost exactly at a right angle with the axis of the tooth, fully one half of which was missing, and the pulp protruding from the full width of the exposed chamber.

The first step was to extirpate the pulp which was done by drilling a small hole diagonally in the exposed dentine to a point of barely exposing that organ, making a small application of arsenic and sealing. While this was taking effect the projecting pulp was covered loosely by rubber-dam, ligated around the neck of the tooth, the reason for this mode of attacking the pulp being that the patient had a habit of fainting away on the least contact with the exposed part. This acted successfully, the pulp was removed and canal filled with chlora-gutta-percha to about one-third its length. After dressing the fractured end, which required very little as the break was remarkably straight and clean, and running a groove with a wheel burr around the lower inside edge of the slightly enlarged pulp chamber; a covering of cohesive gold was made at this point, leaving the chamber open in the center, and this in turn was dressed to about the thickness of 28 gauge. Meanwhile a porcelain tip had been carved, having a dove-tailed groove on its palatine surface, running in line with the axis of the tooth, and two platinum dowels to extend into the pulp chamber, with as much space between them as the walls of that cavity would allow, and about three-sixteenths of an inch long.

After fitting the porcelain tip to the cohesive gold surface

on the end of the stump as accurately as possible, that portion of the canal not already stopped with gutta-percha was filled with phosphate cement, and the porcelain tip carried into position. When sufficiently set, enough of the cement was cut away in the pulp chamber and between the dowels to secure firm anchorage for a cohesive gold support or backing, which was continued down into the dove-tailed groove in the palatine surface of the tip.

On being finished the only gold in sight was the thin line across the face, and that in the dove-tail slot upon the opposite side. The strength of the operation was proven the following winter, when a blow from a "shinny" or polo stick fractured the adjoining left central diagonally on its mesial aspect; and sore, but not otherwise injured, the one operated upon.

W. P. C.

"AND WE FORBADE HIM, BECAUSE HE FOLLOW-
ETH NOT US."

The *Western Dental Journal* for April contains a paper by Dr. J. J. R. Patrick, entitled "Comment and Criticism," which seems to reveal so much misapprehension on the part of the author, as to be worthy of some comment and perhaps criticism. He begins by berating the ARCHIVES OF DENTISTRY, apparently on the ground that he supposed it was the organ of a sect in dentistry—his sect—and should therefore exclude everything inconsistent therewith, especially my article on "Homeopathic Therapeutics in Dentistry." With this special point I have no concern, but I wish I could persuade the doctor to take a more cheerful view of the outlook; he is too much impressed with the danger of such publications to the profession. I venture to think the profession is advancing, notwithstanding his conclusion that the "scientific progress of dentistry has been, and now is, seriously embarrassed by the theories of speculative and ambitious men who have, and are, entailing upon the practice of dentistry an evil from which it cannot be

readily relieved ;" and also that his estimate of the intelligence of the profession is much too low when he says, "the average practitioner does not possess that faculty, which cannot be too highly prized in the investigation of truth, that of suspending judgment upon doubtful questions in the absence of sufficient facts to authorize a definite, or at least reasonable, conclusion." With this idea in mind, of course, it is natural for the author of "Comment and Criticism" to announce that "that it is not the intention to enter into the merits or demerits" of the subject, and to resort to the antiquated mode of denunciation and ridicule, and of charging with deceit. If any subject is not of sufficient importance to be dealt with on the basis of its "merits or demerits" it seems a waste of time to refer to it at all, and if the doctor had a just appreciation of the intelligence of his fellow practitioners he would know that bulls and anathemas will make little impression upon them, and belong to a period of the world that is past. *Average* dentists are far too intelligent to *suspend their judgments* very long before getting at the true inwardness of such *comments and criticisms* as these, which consist mostly of abuse of those with whom he does not agree.

J. MORGAN HOWE.

RECENT ACTION OF THE AMERICAN MEDICAL ASSOCIATION.

The American Medical Association, which held its annual meeting in Chicago in June this year, took an unusual, unlooked for, yet very gratifying action in regard to dentists. (See Chicago Letter).

We consider this action taken by the Medical Association the most important step in the direction of higher education and appreciation of dentistry ever taken. It seems to us to settle the question that has been so much discussed the last year, and decides that dentistry is a specialty of medicine. The only thing remaining to be done is that the dental schools of the country will at once take steps to meet the require-

ments of the resolution, by a preliminary examination and enlarging their curriculum to meet the standard.

We recognize the action taken by the National Medical Association as generous and kind. We clasp the brotherly hand extended and sincerely believe it will be for the good of physicians, dentists and humanity.

C. S. S.

ZONULAR CATARACT AND DENTAL MALFORMATION.—Dr. J. B. Story (*Ophthalmic Review*) cites several cases in which cataract was associated with "rachitic" (not Hutchinson) teeth in children, who presented, generally a history of infantile convulsions, cranial deformities and defects in intelligence, all of which abnormalities he traced to the action of rickets. The rachitic teeth are, as a rule, thicker and coarser than the normal; the nearly formed incisor appears somewhat cubical and shapeless, though the shape can, in many cases, closely approximate the normal. The enamel, instead of gradually thinning away on the neck of the tooth, terminates abruptly in a swollen ridge. The delicate horizontal furrows, to which the enamel owes its satin-like appearance, become so enlarged as to even be visible to the naked eye, and sometimes, especially toward the cutting edge, a horizontal row of round holes marks the position of one of these excavated grooves. The body of the tooth terminates in a convex border at the cutting edge. The junction of the labial and lingual surfaces of the enamel runs as an irregular, zigzag line over the surface of the tooth. Sometimes the enamel is quite absent in grooves, the floor being formed by the discolored dentine.—*Medical Standard*.

JOHN HUNTER'S BED-STEAD which was presented by Professor Owen to Frank Buckland the naturalist and by him made into a chair, has, since his death been presented to the Royal College of Surgeons, England.

G. L. P.

CORRESPONDENCE.

CHICAGO LETTER.

CHICAGO, ILL., June 15, 1887.

MR. EDITOR—The thirty-eighth annual gathering of the American Medical Association which was held in our city last week was the largest in the history of the association. The chairman of the registration committee reported some fourteen hundred members in attendance. The greater proportion were very naturally from the West, but the South and East were well represented. In looking over the programme a large proportion of the papers were found to be by gentlemen from the eastern states; in one section on the first day four of the six papers presented were by eastern men. This, I think, proves very conclusively that the feeling of ill-will is passing away, and that the usefulness of the association has not ended, as some would have us believe.

The section of oral and dental surgery was well attended, and the papers, eight in number, were of more than ordinary merit. They will appear *seriatim* in the journal of the association.

The paper by Dr. G. Frank Lydston, of Chicago, on the "Correlation of General and Dental Medicine and Surgery," was listened to with marked attention. The author took the ground that in order to understand the various diseases of the oral cavity it was necessary to be familiar with all the underlying principles and sciences of medicine and surgery, and that if the dental and oral surgeon could successfully treat a case of necrosis of the jaw he was capable of treating necrosis in other portions of the body; if he could diagnose and treat cancerous affections of the lips he was qualified to treat such

affections in other portions of the body, etc. The field, however, was too large for one individual to occupy. Specialism in medicine had grown out of this fact.

It was therefore better for us to confine ourselves to the department which we had chosen and not try to cover the whole field of medicine and surgery as did one dentist of his acquaintance. The paper must be read to be appreciated, and a synopsis would be out of place in this communication.

The other papers presented and the authors are as follows :

"Pathological Conditions of the Teeth and their Systemic Effects." By K. B. Davis, Springfield, Ill.

"Pathological Heredity and Congenital Abnormalities of the Teeth." By A. H. Thompson, Topeka, Kan.

"Dental Lesions Causing Facial Neuralgia and Other Neural Phenomena." By Arthur B. Freeman, Chicago, Ill.

"Sponge Grafting." By W. H. Atkinson, New York.

"Dental Diagnosis." By Chas. P. Pruyn, Chicago, Ill.

"Conservative Dentistry." By A. E. Baldwin, Chicago, Ill.

"A Case of Specific Disease of the Upper Jaw and the Bones of the Nose." By W. W. Allport, Chicago, Ill.

The officers of the section elected for the coming year were Dr. Jonathan Taft for chairman and Dr. Eugene S. Talbot, secretary. The Association selected Cincinnati as the next place of meeting and the time the first Tuesday in June, 1888.

The meeting of 1887 will be a memorable one from the fact that the association voted to recognize as medical men all dentists who had passed the chairs of the foundation sciences of medicine and surgery as required in the best class of our medical colleges.

The resolution was introduced by Dr. N. S. Davis, the father of the association and president of the Ninth International Medical Congress, with fitting remarks as follows :

Resolved, That the regular graduates of such dental and oral schools and colleges as require of their students a standard of preliminary or general education and a term of professional study equal to the best class of the medical colleges of this country and embrace in their curriculum all the fundamental

branches of medicine, differing chiefly by substituting practical and clinical instruction in dental and oral medicine and surgery, in place of practical and clinical instruction in general medicine and surgery, be recognized as members of the regular profession of medicine, and eligible to membership in this association on the same conditions and subject to the same regulations as other members.

Dr. Davis in introducing the resolution, said he wished to explain its object. There are two objects to be had in view; first, to relieve a degree of embarrassment that exists between the regular profession as we consider it, and the profession of dentistry. The department of dental and oral surgery is a part of the profession of medicine as much as the department of ophthalmology or otology or any other ology. Our teeth and mouths are a part of our system as much as any other part, and are used more than any other part. The embarrassment is this, that in the history of the development of dentistry it originated mostly in mechanical operations. Steadily it has advanced, and in years gone by—quite a number of years ago—our lamented friend, Prof. S. D. Gross, made a proposition that an oral and dental section be provided as a section in this association. It was seconded by Dr. Sayre and myself, and it was organized. The International Medical Congress of 1881 provided a section for dental and oral surgery. The Congress to be held in Washington has done the same thing and it will be one of the most thorough and best organized sections in the Congress. There is an embarrassment in this respect. It is to know just who and by what line of demarkation those engaged in that department shall be recognized as members of the regular profession. Now it is proposed to make a line and draw it where this resolution says, that all those who are qualified by general education and a course of study equal to the best medical colleges, a curriculum embracing the entire fundamental principles of medicine, with the provision that instead of special instruction in clinical medicine instruction may be had in dental and oral surgery, such shall be recognized as members of the profession of medicine.

It will take away a sort of embarrassment. There is a more far-reaching and more valuable underlying object in this resolution and that is that to be recognized as a member of the profession, if this resolution is adopted by this body, they must have the education received in schools that require these qualifications and it makes a strong lever with which to lift up the course of study in dental schools. Such are my reasons for bringing up the resolutions. I will say nothing more on the subject. The motion was made that the resolution be adopted by the association and it was carried unanimously.

The presentation of the resolution is due to the efforts of our honored friend, Dr. W. W. Allport; he alone conceived the idea and was backed in it by the influence of the Section of Dental and Oral Surgery, all of whom are medical men, by the way, and holding the M. D. degree. The action of all concerned is to be commended, for it shows a liberal spirit and a desire to do what is right and just. The recognition of D. D. S. as a medical degree has been accorded to us, and that without bluster or agitation. The facts were presented to the association, and immediately they did that which it was right and proper under the circumstances they should do.

It now remains for us to prove that we are worthy of such recognition. Recognition of itself is not of so much consequence, however, as is the fact that it will tend to elevate, broaden and make more thorough the requirements for graduation in dental surgery.

Dr. Allport has always been among the foremost advocates of higher dental education, and has labored unceasingly to this end for more than twenty years. But now in his old age (?) he is about to realize his hopes, and sees the profession of which he has been so conspicuous and honored a member occupy the position that its scientific attainments deserve and which he has taken no small part in bringing about.

Yours fraternally,

DENTATUS.

TO THE DENTISTS OF THE PACIFIC NORTH-WEST.

SPOKANE FALLS, W. T., June 5, 1887.

As the country embracing the State of Oregon and the Territories of Washington, Montana and Idaho is well supplied with good dentists, and feeling that we have a sufficient number to organize a good dental society, I now, through the ARCHIVES, take the liberty of addressing the dentists of this section upon this very important subject.

A good dental association has been a long felt want to many of us. So let us get together and organize, meet at least once a year, if not oftener. Let us elevate ourselves from the mire and show to the world that we are awake and ready to do all we can for the progress of dentistry, for our patients and for ourselves, thereby making us as dentists more worthy to be called such.

Let us rise up above the tinker, botch and quack, and show the people of this grand and glorious country that dentistry is a profession and not a mere trade.

We all know the benefit to be gained by getting together and teaching one another what we can. So let us delay no longer, appoint a place to meet and organize.

All dentists in favor of the above will please address the writer, and if there is sufficient encouragement definite arrangements for organizing will soon be made.

Respectfully yours,

EDWARD PITWOOD, D.D.S.

MEDICAL AND DENTAL ASSISTANTS?

MANCHESTER, ENG., June 17, 1887.

EDITOR ARCHIVES:—A case of the highest importance to medical men and dentists has just been decided in the Court of Queen's Bench (England) on an appeal from the decision of the Judge of the County Court of Salford in an action brought by a legally "qualified" man to recover for professional ser-

vices wholly rendered by an assistant who was an "unqualified" man—that is, did not possess a legal right to practice for himself, but was considered fit by this qualified (?) man to see his patients. The County Court Judge decided that such an account could not be collected, and the Upper Court sustained the decision. Thus is exposed and swept away one of the shams of the men who are so clamorous for penal clauses in Dental and Medical Acts of Parliament. Under the pretence of protecting the public against incompetent men, although they have not got all they want, they have managed to prevent any but a "qualified" man collecting his accounts in a court of law. Having secured so much of a monopoly for themselves, in shameless contempt of all their pretensions and of the interests of those they profess to guard, they turn round and employ these very same "unqualified" men as assistants at a small salary, and send them to their patients, who have the same fee to pay as if the employer went himself. The Court has now affirmed that if a man is declared by law not fit to practice by himself, the law must hold him unfit to practice in another man's name. Believe me to remain,

Yours sincerely, PARSONS SHAW.

262 Oxford Road.

THE DIET OF CENTENARIANS.—A writer on this topic holds in a contemporary that "the rules of life laid down by Cornaro are probably perfect," and he intimates that, in his opinion, "twelve ounces of solid food and sixteen ounces of liquid appear to be the maximum requirements of age." The solids ought, he thinks, to be made up of one-third animal food, chiefly flesh, and two-thirds vegetable nourishment. He dislikes fruit and fish' and says that salt and sugar should only be used sparingly. He also deprecates the too copious use of milk as well as of drugs, and after adding that industry of some kind should be practised, he gravely points out the valuable medicinal properties of port wine. The latter is certainly more suited to advanced life than is almost any other from of stimulant.

—*Medical Record*

DENTAL LAWS.

AN ACT TO REGULATE THE PRACTICE OF DENTISTRY IN THE STATE OF ALABAMA, AS AMENDED FEBRUARY 28, 1887.

SECTION 1. Be it enacted by the General Assembly of Alabama, That from and after the passage of this act, it shall be unlawful for any person to engage in the practice of dentistry in the State of Alabama, unless said person has obtained license from a board of dental examiners, duly authorized, and appointed by this act to issue such license; Provided that dentists who have been in the regular practice of dentistry for five years next preceding the passage of this act shall not be required to submit to an examination, and shall be entitled to license without fee, which shall be transmitted to him by mail, or otherwise, upon his application accompanied by an affidavit to the fact of his having been in the practice for the required time.

SEC. 2. Be it further enacted, That the board of dental examiners shall consist of five (5) dental graduates, or practitioners of dentistry, who have obtained a license to practice dentistry from a dental board organized under this act, and who are members in good standing of the Alabama Dental Association: Provided, that said graduates or practitioners have been practicing dentistry in the State of Alabama for a period not less than three (3) years.

SEC. 3. Be it further enacted, That it shall be the duty of said Alabama Dental Association, at its annual meeting in April, 1887, to elect said Board of Dental Examiners, whose terms of office shall be respectively five, four, three, two and one years, in the order in which they are elected; and at each annual meeting of said Association thereafter, one member shall be elected to fill such vacancy, who shall serve for the period of five years. The president shall have the power to fill all vacancies in said board for unexpired terms.

SEC. 4. Be it further enacted, that it shall be the duty of said board of examiners—

1st. To meet annually at the time and place of meeting of the Alabama Dental Association, or oftener, at the call of any three members of the board. Thirty days notice must be given of the time and place of meeting of said board, said notice to be mailed to all practicing dentists in the State.

2d. To prescribe a course of reading for those who study dentistry under private instruction.

3d. To grant license to all applicants who undergo a satisfactory examination, who shall pay to the said board a fee of five dollars for said license.

4th. To keep a book in which shall be registered the names of all persons licensed to practice dentistry in this state.

SEC. 5. Be it further enacted, That the book so kept shall be a book of record, and

a transcript from it certified by the officer who has it in keeping with the common seal of said board, shall be evidence in any court of this state.

SEC. 6. Be it further enacted, That three members of said board shall constitute a quorum for the transaction of business, and should a quorum not be present on the day appointed for its meeting, those present may adjourn from day to day until a quorum is present.

SEC. 7. Be it further enacted, That one member of said board may grant a license for an application to practice until the next regular meeting of the board, when he shall report the fact, at which time the temporary license shall expire, but such temporary license shall not be granted by a member of the board after the board has rejected the applicant.

SEC. 8. Be it further enacted, That any person who shall, in violation of this act, practice dentistry in this state, shall be liable to indictment, and, on conviction, shall be fined not less than fifty nor more than three hundred dollars; Provided, that nothing in this act shall be construed to prevent persons from extracting teeth. Provided that nothing in this act shall be so construed as to require any person who is now lawfully engaged in the practice of dentistry to procure any additional license or to attend any meeting or meetings of the State Dental Association.

SEC. 9. Be it further enacted, That on the trial of such indictment it shall be incumbent upon the defendant to exempt him from the penalties of this act, to show that he has authority under the law to practice dentistry in this state.

SEC. 10. Be it further enacted, That every person to whom license is issued by said board of examiners shall, within thirty days from date thereof, present the same to the judge of the probate court of the county in which he resides, who shall officially endorse said license and seal it with the seal of the court, and who shall record said license in a book in his office, and who shall be entitled to a fee of one (1) dollar for his services; but a temporary license issued under section 7 of this act need not be sealed or recorded.

SEC. 11. Be it further enacted, That it shall be the duty of the solicitors of this state to prosecute all persons violating all or any portion of this act.

SEC. 12. Be it further enacted, That all laws or parts of laws in conflict with this act be and the same are hereby repealed.

Amended and approved February 28, 1887.

BACTERIA IN SEA AIR.—Mourea and Miquel have made microscopical analyses of sea air at various places, and state, as the result of their observations, that when the breezes come from the sea the air is almost free of bacteria. When 100 kilometers out at sea, the breezes coming from shore are also almost free from them, thus proving that the sea is an insurmountable barrier to contagion. On vessels making long passages it was noticed that, although the compartments were not entirely free from bacteria, they contained about 100 times less than in a Parisian home.—*Technics* Feby, 1887.

EXTRACTS.

AN OVERDOSE OF COCAINE.—Grave symptoms due to acute intoxication from hypodermatic use of cocaine have not hitherto been frequently observed. Dr. Ramsden places on record, in the *Australian Medical Gazette*, the following case: B. C. had been suffering from neuralgia caused by a defective tooth. It was decided to extract the offending tooth. This was found to be impracticable, and an injection of cocaine (ten per cent. solution) was then given. The patient found immediate relief, lasting a number of hours. Dr. Ramsden then continues as follows: "Next day, the pain being very severe, he sent to his chemist for a similar solution, and had three minims injected but without the desired effect; he returned it to the chemist and asked him 'to make it stronger,' which he did, making it twenty per cent. He brought this to me, but omitted to tell me that the solution was double the strength of that which I had used. He told me that three minims had not given him the relief he had experienced from mine; I therefore gave him four minims of what I believed to be a ten per cent. solution, and within five minutes he became restless and inclined to vomit; he then began to feel a sensation of pins and needles in the left hand and arm, which rapidly extended to the right side. This was speedily followed by contraction and rigidity of the fingers, arms and legs; there was also a tendency to opisthotonus. His pulse became extremely rapid and feeble, his face livid, and the muscles of his mouth and cheeks strongly contracted. His respirations were short and convulsive, his feet and hands very shortly became cold, and a profuse perspiration broke out on his head and face. I first gave him half a tumbler of brandy, followed at short intervals by drachm doses of spiritus ammoniæ aromatici, and applied

strong mustard over the cardiac region, and used friction to the upper and lower extremities; at the same time I let him inhale a few drops of chloroform to try and check the spasmodic contractions. After continuing these remedies for nearly an hour the pulse began to improve, the color to return to his face, and the rigidity of the muscles lessened but returned again immediately I stopped the friction. At the end of two hours he improved more rapidly, but felt somewhat drowsy, and it was not until about four or five hours that all symptoms had subsided. On questioning him afterwards regarding his sensations, he told me that although he was unable to speak coherently, he knew all that was passing, and it was not until he felt the abdominal muscles becoming rigid that he felt anxious, for then he thought he was dying, and a sensation of suffocation came over him.—*Record*.

INCREASE OF POPULATION.—The population of America doubles in about twenty years, or five times in century, five doublings meaning a thirty-two fold increase. In four centuries at this rate, the increase of population of the United States would be about a million-fold (thirty-two times thirty-two times thirty-two times thirty-two times), or the population would amount to sixty millions of millions, or thereabouts. This would be a population of 16,000,000 per square mile, 10,000,000 per square mile, assuming a fair absorption of surrounding territory, and 4,000,000 per square mile if the whole of North and South America were available for the American population. About three-fourths of a square yard of surface would then be available for each inhabitant of the double continent. If the whole earth were peopled by these 60,000,000,000,000 Americans, there would be nearly three square yards of space for each person.—*Richard A. Proctor, Globe Democrat*.

A LONG LIFE.—Cornaro adopted for his own individual habit of life, when he found that he was exhausting the very springs of life, wasting the stored-up constitutional energies of his frame by unduly luxurious living, he wisely changed his

way of living to what his friends regarded as a foolishly abstemious regimen. Condemned by the unanimous voice of the physicians to death within two years, he so developed his vital energies that he lived for sixty-four years instead of two, attaining the ripe age of 104 years before death claimed him. Moreover, whereas in the fulness of his youth and manhood life had been but as a burden to him, life during the last three-fifths of his time—for a quarter of a century beyond the four-score years, when the Psalmist says life is but labor and sorrow—was to him well worth living, nay full of satisfaction and delight.—*Richard A. Proctor, Globe Democrat.*

It is well known that when a deep hole is made in the ground, the deeper it is run, the greater the heat is at the bottom. In a mine 3,000 feet in depth, it has been ascertained that the increase in heat was 1° F. in 55 feet. This makes 54° for 3,000 feet. If the same progression continued thus for 300,000 feet, the temperature would attain $5,400^{\circ}$. Investigation and study lead to the belief that matter in a state of fusion would begin at the depth of 150,000 feet, were not the pressure so great as to prevent actual melting. This leads to the conclusion that the whole earth is internally in a highly heated state, and that the comparatively cool crust upon which we dwell is, in proportion, much less than the thickness of an orange skin relatively to an orange.—*Exchange.*

CRUCIBLES of nickel have lately been adopted in some chemical laboratories, in place of the silver ones generally used for melting caustic alkalis. They have the advantage not only of being cheaper, but of being capable of resisting a higher temperature than the latter, and the result is said to be favorable.—*Exchange.*

THERE are 25,810 doctors in Great Britain, or one for every 1,350 inhabitants. In France, the proportion is one for 1,400; in Austria, Germany and Norway, one for every 1,500; in the United States one for every 600; while in Russia there is only one for every 6,226.—*Exchange.*

BRIEF MENTION.

DR. TOM AND DR. JOHN EVANS.—[Special cable despatch to the *World*.]—The *Gil Blas* publishes the following paragraph concerning the fight which has been going on for years past between Dr. Thomas Evans, the well-known American dentist in Paris, and his nephew, Dr. John Evans, who is a rival dentist, also residing here: “Dr. Thomas Evans has undertaken to suppress his nephew by obliging him to abandon the name of Evans. The father of Dr. John Evans married a Miss Elizabeth Doyley. Dr. John Evans, who, like some of the citizens of the American and French republics, loves titles, had the weakness to solicit legal right to bear his mother's name. This was granted to him in Philadelphia, by a decision of the Court of Common Pleas, in 1879, and the Pope conferred upon him the title of Marquis. The name Marquis d'Oyley sounded well in the salons, but Evans was more useful in business. Dr. Thomas Evans held that, having renounced the name of Evans, he must adhere in business to his adopted name. The Tribunal of the Seine supported Dr. Thomas Evan's view, but the superior court has reversed this decision, holding that the nephew, Dr. John, could not really divest himself of the name of Evans.”

PROFESSIONAL ETHICS.—While the medical profession has made great progress within the century, it is an acknowledged fact that that progress has not been as great as that made in other sciences. This is undoubtedly due to that inhibition the profession has laid on itself, and known as “professional ethics.” There ought to be but one school of medicine, and they should embrace every known medicine and treatment. That such is not the case is seen in the existence of the allopathic, homœopathic, and the eclectic schools. These

differences are due to the "professional ethics" which prohibit one school from following the practice of another. "Professional ethics" are akin to caste in the Eastern countries, a deadly enemy to progress.

IF THE condensed breath collected on the cool window-panes of a room where a number of persons have been assembled be burned, a smell of singed hair will show the presence of organic matter; and, if the condensed breath be allowed to remain on the windows for a few days, it will be found on examination by microscope, that it is alive with animalculæ. It is the inhalation of air containing such putrescent matter which causes half the sick headaches, which might be avoided by a circulation of fresh air.—*Phil. Bul.*

IT MAY not be universally known that the colored people of this country have not only a medical college but a college of dentistry of their own. There were ten graduates at the eleventh anniversary of the Meharry College in Nashville, this year, and three at the first anniversary of the dental department of the Central Tennessee College. The audience of twelve hundred, included prominent city and state officials, and the exercises were better than the after dinner speeches of the New York Odontological Society.—*Exchange.*

REMEDY FOR NEURALGIA.—Dr. John T. Metcalfe, a well-known physician of New York, writes to the *Boston Medical and Surgical Journal*, that the following formula was learned by him from one of his patients whom he sent to Cuba with the hope that a change of climate would afford relief from sciatica. A French physician who there attended him, used this remedy with the best results, and Dr. Metcalfe has tried it so often since with success, that he speaks of its value with great confidence: Equal parts of the tinctures of aconite root, colchicum seeds, belladonna, and actæa racemosa. Six drops to be taken every six hours until relief is felt. The Doctor says, that "as an internal remedy it is worth all others put together of which I have knowledge."—*Am. Druggist.* C.

RUST-STAINS on nickel-plating may be removed by a thoroughly greasing, and after several days, rubbing with a cloth moistened with water of ammonia. Any visible spots may then be moistened with dilute-hydrochloric acid and immediately rubbed dry. Washing and the use of polishing-powder complete the process.—*Am. Druggist.* C.

"PEOPLE ASK if they shall live after death who have not yet lived at all; and the only answer is: *Live now!* The certainties of the future lie in the positive realities of to-day."

EIGHT YEARS ago Miss B. had all of her six year molars extracted. A few years later a perfectly shaped bicuspid tooth erupted in the place of the left inferior first molar, so she now has three perfect left inferior bicuspid teeth. SCHELL.

THE CELEBRATED BOERHAAVE, who was once addressed by a Chinese mandarin as the "physician of Europe," remarked upon his deathbed that he should leave "three most excellent physicians behind him;" and when asked by his attendants who the three distinguished physicians were, replied: "Diet, Air and Exercise."

FOR REGULATING by ligatures, use *unwaxed* saddler's silk. An ordinary slip-noose of this material will retain its position no matter where the point of traction comes, and will not work upon the neck of the tooth and into contact with the gums.

F. G. E.

BOOK NOTICE.

THE MICROSCOPICAL STRUCTURE OF A HUMAN TOOTH, TOGETHER WITH SOME UNUSUAL AND IRREGULAR FORMS OF TEETH. By C. H. Stowell, M. D., F. R. M. S., Professor of Histology and Microscopy in the University of Michigan, author of "Students' Manual of Histology," "Microscopical Diagnosis," late editor of "The Microscope," Etc. Ann Arbor, Michigan, C. W.

Arnold, Leonard Block, John R. Street, Detroit, Michigan, general agent. Sold by subscription. Price \$6.00.

This work is issued in the form of a portfolio. The plates, nine of which represent the minute structure of the teeth and three illustrate seventy-five unusual and irregular forms of teeth, are upon heavy cardboard $11\frac{1}{2} \times 16$ inches. Each plate is accompanied by an explanatory text. A number of pages are devoted to a description of the microscopic structure of the teeth and directions for preparing and mounting specimens. The work is bound in a double tinted paper cover and this included in a leatherette portfolio. All the plates are on guards or hinged. In the text the author has followed in the main the teaching of our text books and gives the reader a plain, concise, explanatory detail of the different structures of a human tooth, which he has so admirably and artistically shown in the accompanying plates. In a brief introductory he has given a glimpse of the progress made in the study of this subject from the time of Herodatus, Hippocrates and Aristotle down to the present in which he says, "We still find many unanswered questions and some apparently well settled ones appear on the verge of an upheaval."

The work taken as a whole is one of the handsomest ever published in this country. The plates are beautifully executed and show the author to be an artist as well as a careful painstaking microscopist. It is a work that has long been needed and will be a valuable auxiliary in the hands of the teacher and an aid to the dentist in imparting general information. No dental library is complete that does not contain a copy.

ELEMENTARY MICROSCOPICAL TECHNOLOGY. Part I. The technical history of a slide. By. Dr. Frank L. James. The Medical and Surgical Journal Company, St. Louis, Mo.

We are in receipt of a copy of this work and for the purposes of the amateur is the finest work extant. A knowledge of the difficulties encountered by the amateur microscopist has prompted the author to issue this work for his instruction, yet the more experienced will find it a valuable aid. It contains formulæ for the most common and valuable preserv-

ing fluids, hardening processes as well as late processes for embedding.

It instructs in the different methods of section cutting and is illustrated with cuts showing the latest instruments in use for the purpose. The histologist will find it a most valuable addition to his library and one which he can not well do without—the chapter on staining alone being worth more than the price of the book.

It is couched in language which can be easily understood by the most inexperienced and we believe that it will be thoroughly appreciated by all in need of such a work, as by its study the way is made so plain that none need err therein. We bespeak for it the recognition which its merits deserve.

McC.

BOOKS RECEIVED.

TOME'S DENTAL SURGERY, 3d edition revised and enlarged. By Charles S. Tomes, M. A. F. R. S., late lecturer on dental anatomy and physiology to the Dental Hospital of London. With 292 illustrations, published by P. Blakiston, Son & Co., 1012 Walnut street, Philadelphia, Pa. Price \$5.00. For sale by S. M. Simpson & Co., St. Louis, Mo.

PAMPHLETS RECEIVED.

TRANSACTIONS OF THE CALIFORNIA STATE ODONTOLOGICAL SOCIETY, 1884 AND 1885.

THE LITERARY NEWS. An eclectic review of current literature. Published monthly, and containing the freshest news concerning books, authors, lists of new publications, reviews and critical comments, characteristic extracts, sketches and anecdotes of authors, courses of reading, bibliographical references, literary topics of the magazines, prize questions on choice books and other literary subjects. Published by John L. Boland, bookseller and stationer, 610, 912 Washington Avenue, St. Louis. \$1.00 yearly; 10c per No.

THE FAMILY DOCTOR. An address delivered to the members of the Missouri Institute of Homœopathy. By the president, Dr. J. Martine Kershaw. *Periscope* print, St. Louis.

FIFTH ANNUAL REPORT OF THE ILLINOIS STATE BOARD OF DENTAL EXAMINERS. Made to the Governor of Illinois in pursuance of law, Dec. 15, 1886. Members of the board, 1887; G. V. Black, Jacksonville; Homer Judd, Upper Alton; C. A. Kitchen, Rockford; R. N. Lawrance, Lincoln; Geo. H. Cushing, Sec'y, 34 Monroe street, Chicago.

ANNUAL REPORT OF MORSE DISPENSARY, of Cooper Medical College for 1886. San Francisco.

LONG ISLAND COLLEGE HOSPITAL, BROOKLYN. Twenty-ninth annual announcement.

WILHELM HERBST'S VISIT TO AMERICA. A report of his clinics and operations before American dentists. Reprint from *Independent Practitioner*.

THE HERBST METHOD OF FILLING TEETH. By C. F. W. Bödecker, D. D. S., M. D. S., New York. Reprint from the *Independent Practitioner*.

COURTESY AMONG DENTISTS AT PROFESSIONAL MEETINGS. Annual Oration, delivered before the American Academy of Dental Science, Boston, Mass., November 10, 1886. By J. N. Farrar, M. D., D. D. S., New York City. Reprints from *Independent Practitioner*.

TRANSACTIONS OF THE NEW JERSEY STATE DENTAL SOCIETY, for the years 1884-5-6. Compiled from Stenographic Notes. Newark, N. J.

JOURNALS RECEIVED SINCE LAST ISSUE.

Journal of the British Dental Association. American Medical Journal. Weekly Review, Texas-Courier Record, Philadelphia Medical Times, American Practitioner and News, Cincinnati Lancet-Clinic. Cosmos, Independent Practitioner, Progress, Items of Interest. The Doctor, New York Medical Journal. Vick's Monthly, Medical Record, Journal American Medical Association, Journal of Reconstructives, Medical Annals, St. Louis Medical and Surgical Journal, Phrenological Journal. Chicago Medical Times. Annals of Surgery, The Microscope. Buffalo Medical and Surgical Journal. Ohio Journal of Dental Science. Galaxy of Music, British Journal of Dental Science, Dental Register, American Journal of Dental Science, Peoples Health Journal, Progress Dentaire, Southern California Practitioner. Polyclinic, Dental Record, Cincinnati Medical and Dental Journal, Medical Investigator, American Journal of Dental Science. Journal of Heredity, Medical Bulletin, Pacific Record. L'Odontologie, Southern Dental Journal, Hahnemannian Monthly. Electric Medical Journal.

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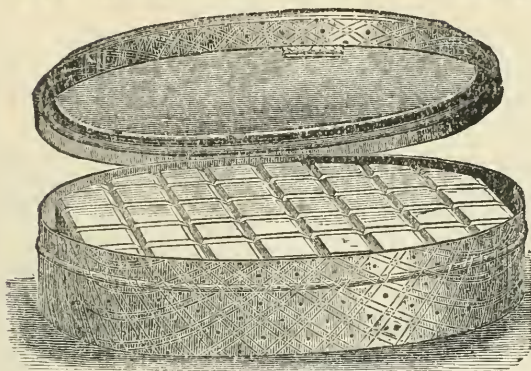
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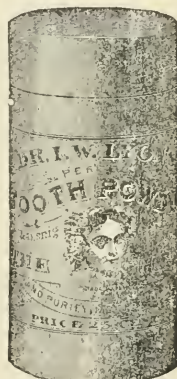
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Announcement for the Course of 1887-88.

On Tuesday, October 4, 1887, the Northwestern College of Dental Surgery commences its Third Annual Session, and, in the interest of advanced education in the Dental Profession, the Directors have decided to extend the school year from the present course of six months to one of nine months, thus giving a longer time for study and practical instruction and avoiding the crowding necessary in a short term.

Every candidate for admission must be eighteen years of age, and must present to the Faculty satisfactory evidence of a good moral character. Unless already a matriculate of the college, or of some other recognized college or university, or a graduate of some recognized academy or high school, or holding a teacher's certificate, he must pass an examination in Arithmetic, Geography, English Grammar and Composition, United States History and Natural Philosophy. He shall subscribe to Article I, Section 3, of the Code of Ethics of the American Dental Association.

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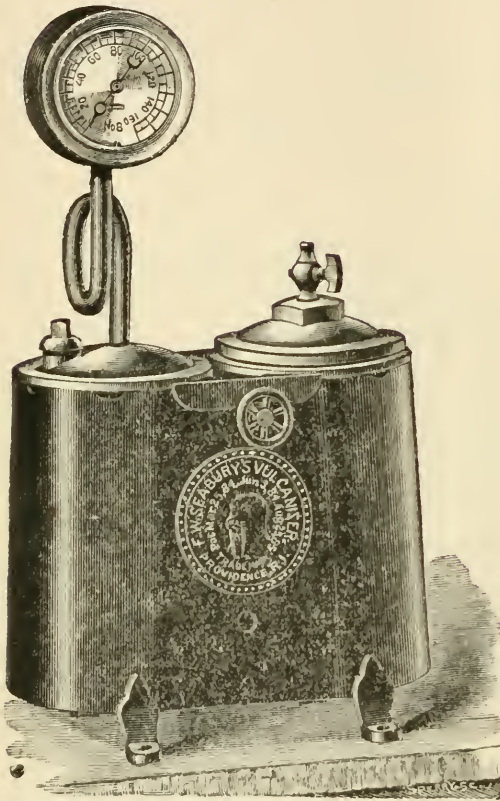
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TO THE PROFESSION.

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As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondents as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

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ORIGINAL ARTICLES.

CERTAINLY IT IS EXCELLENT DISCIPLINE FOR AN AUTHOR TO FEEL THAT HE MUST SAY ALL HE HAS TO SAY IN THE FEWEST POSSIBLE WORDS, OR HIS READER IS SURE TO SKIP THEM; AND IN THE PLAINEST POSSIBLE WORDS, OR HIS READER WILL CERTAINLY MISUNDERSTAND THEM. GENERALLY, ALSO, A DOWNRIGHT FACT MAY BE TOLD IN A PLAIN WAY; AND WE WANT DOWNRIGHT FACTS AT PRESENT MORE THAN ANYTHING ELSE.—*Ruskin*.

FLOWERS OF SULPHUR.

DR. FRANK. A. BREWER, SAN FRANCISCO, CAL.

Through the medium of our dental journals the attention of the profession has been recently called anew to this article of the materia medica as a specific for calcareous depositions and gum lesions. The writer of this article suggested its use for a like purpose in an essay entitled "Gum Diseases," delivered at an annual session of the Missouri State Dental Association, held in St. Louis in 1867.

It was at that time merely suggested because its merits had been accidentally observed but a day or so previous—the trial being but an experimental one.

Later on it was "recommended" by the writer in a journal article, (?) and still later again suggested by some member of

a local society in Europe (possibly its present agitator, Mr. Macleod).

There is no doubt, however, that when a general "dip" in this drug has been made by the "boys" all around, the usual cry will be heard: Tried, but no good.

However, as some one has asked for a public expression from those experienced in its use; the following is volunteered:

For the past thirteen or fourteen years it has found a prominent place in the the therapeutical closet of the writer. Prominent, owing to its marked ability in combating advanced as well as primary gum lesions, but in the former conditions a resort to the employment of the sublimed grade has been deemed necessary through its increased acidulated redundancy and consequently increased energetic alterative power in breaking up necrosed conditions, which, of course, must be wholly eradicated to assure permanent success.

In incipient cases the precipitated sulphur has given satisfaction, when possessing sufficient acidulated strength, far more satisfactory when uncombined with the neutral bases.

A detailed explanation of the varied character of this ingredient is unnecessary here, as it may be found in the U. S. Dispensatory. Every drug store has one, and every town and village has a drug store.

It is well, however, to remark that the precipitated sulphur generally found upon the market, especially if of recent manufacture, is tasteless; hence, void of the remedial factor sought, *i. e.*, sulphuric acid; by exposure its strength increases; yet, notwithstanding, fails at its best to compare with the sublimed.

The American preparations being largely adulterated with "arsenites" are, therefore, poisonous, and should be used with caution. Success wholly depends upon a thorough course of procedure. Carelessness availeth no good. All foreign deposits must be thoroughly removed, and it should be borne in mind that no case of calcareous deposition exists, if of marked insinuation or of protracted standing without the presence of more or less necrosis of the alveolar process;

hence, scraping of the alveolus must not be overlooked under any circumstances.

In the application of sulphur the customary mode of procedure by the writer is as follows:

1. All calcareous depositions are as thoroughly removed as possible, and the alveolar margins looked after.

2. A brisk horizontal friction upon the gum exterior to the area involved, with the index or fourth finger, by which the engorged capillaries are freed and the removal of all foreign bodies from the gum pockets assisted.

Upon cessation of the hæmorrhagic and seruminal flow the sulphur is then applied, being conveyed within the pockets and upon the area necrosed (if existing) by the aid of wedge-pointed feathery-edged pieces of soft wood, through the assistance of which two points are achieved.

1. By an increased pressure of the sulphur upon and within the osseous integrity a more decisive filamentous alterative activity follows.

2. As more or less contraction of the gum pockets follow depletion, making doubtful the free admission of the remedial agent to all parts within them, and particularly the alveolar area, the wood point the better assures the accomplishment of this part of the process.

That all intricate sections throughout the whole tooth series may be absolutely reached several shaped points are employed.

The sulphur finding no solvent in its immediate contact with the blood or serum, or saliva, care is observed that deceitful results do not occur by its escape upon application.

Upon completion of the scaling additional applications to the marginal gum area throughout the entire series where involved, the approximal tooth interstices being also well packed, upon which the case is discharged with instructions to apply the same daily with the brush until a subsequent appointment, the strength of the factor being commensurate with existing conditions.

A second and third application by the operator is frequently required, but interference with the necrosed sections has sel-

dom been demanded if the original operations were most thorough.

In order to encourage thoroughness, part of the work of scaling is deferred to a subsequent sitting.

In admissible cases applications of sublimed sulphur (full strength) with the brush by the patient has been advised a few days prior to scaling, by which a reduction of calcareous density has been observed, and also the tediousness of its elimination much lessened. This fact led to the accidental discovery of its merits by the writer just a day or two previous to the meeting of the association herein mentioned, the instance of experiment arising by a package of sulphur being substituted in displacement of the usual box of dentrifice. For a general dentrifice the subjoined formula is customary:

R Carb. mag., or precip. chalk,	-	-	-	3ij
Flores sulphurum,	-	-	-	3j
Ol. rose or wintergreen,	-	-	-	q.s.
Carmine,	-	-	-	q.s.

The oils mask both odor and taste; carmine improves the color.

Permanent remediation in malpositions with this agent has been found quite impossible without the aid of mechanical assistance unless the teeth were found quite short.

As regards internal administration a more marked effect has been exhibited in cases of encephalic or strumous diathesis where the ingredient is either combined or alternated with saline laxatives or cathartics, but in its protracted use uncombined, care has been necessary that the season was well advanced and variation of temperature at its minimum in order to avoid a former complaint of laryngeal or auricular and ligamentous disturbances.

Finally, it may be here added, that no rule can be laid down in its successful use, nor can one discriminate for the operator as to just how and when to use. The responsibility is too ticklish. He must be guided wholly by his case in hand.

PYORRHŒA ALVEOLARIS.

BY C. W. MERRY, STILLWATER, MINN.

Up to the last few years little attention has been given to this very prevalent and destructive disease, and until recently scarcely any literature on the subject has been produced.

While quite a number of methods have been presented for its cure, few theories have been advanced for its cause.

Probably a majority of the cases presented may trace their origin to the accumulations of tartar, uncleanliness and constitutional derangements; occasionally, however, are those for which no visible cause can be discovered and among such are those most reluctant to yield to dental science.

The purport of this article is not to advance any new theory or method of cure, but simply to cite the successful treatment of a case in practice.

On January 15, 1887, Mrs. S., a widow lady, about 40 years of age, consulted me in regard to the looseness of her teeth, and a careful examination resulted in the discovery of a very marked case of pyorrhœa alveolaris.

The patient was much discouraged, having visited several prominent practitioners and receiving but little benefit and no encouragement.

The gums were receded extensively, much inflamed with a considerable quantity of pus oozing out from around the margins.

After thoroughly removing the accumulation of tartar which extended nearly to the apex of the roots of some of the teeth, the pockets were syringed with a solution of bi-chloride of mercury.

The parts having been wiped dry with spunk, ropes of cotton dipped in carbolate of potash (Robinson's remedy) were packed between, around the teeth and into the pockets.

Owing to the excessive soreness thus produced, one tooth at a time, and only three or four at a sitting were treated.

Some of the teeth being very loose they were firmly bound

in position by small flexible gold wires, thus preventing the irritation of the gums which would naturally follow their use in masticating, also allowing the gums to heal tightly around them by first intention.

All of the teeth having been treated in this manner, the patient was dismissed for one week and cautioned to keep the teeth scrupulously clean, using a soft brush to avoid undue irritation while undergoing the reparative process.

After the lapse of a week, the case was found to be progressing finely, the inflammation having subsided, except around three teeth where I found a slight quantity of pus.

These having been treated as before the patient was dismissed for another week, at the end of which time not a trace of inflammation or pus could be found, the gums being entirely healed and the teeth materially tighter.

The gold ligatures were replaced and a mouth wash, containing 5 grains of thymol to the ounce of alcohol, was prescribed to be used three or four times a day.

I did not see the case again for about three weeks, the gums were then in a healthy condition and the teeth quite firm in their sockets.

The ligatures were removed, the mouth wash discontinued, and after advising perfect cleanliness, that is as near as possible, and instructing the patient to visit a dentist every three months, in order that all calcareous deposits might be removed, the case was dismissed as cured.

After three months I again saw the case and did not see a symptom of a return of the disease.

I obtained the Robinson remedy that I used in the case described, from the Welch Dental Company, but have had equal success with some of my own preparation.

I directed the mouth wash to be used diluted in the proportion of about one part of the wash to two parts of water.

MICROSCOPY AND HISTOLOGY FOR OFFICE STUDENTS.

BY DR. GEO. H. M'CAUSEY, JANESVILLE, WIS.

In addition to the microscopic objectives there is yet another combination of lenses to be considered. It is that which is termed the eye-piece and is attached to that portion of the tube farthest from the objective. Its use is to further amplify the image seen through the objective. It is known generally by a number according to its power.

It should be achromatic and of good definition. The kind known as the Huygenian is in most common use. All good working instruments have attached either to the stage or mirror bar what is known as the diaphragm. When attached to and beneath the stage it consists of a disk of metal pierced with holes of different sizes, each of which when stopped in place is exactly in the optical axis of the instrument. Its office is to regulate the amount of light, as in the study of the tissues it is necessary at times to shut out a portion of light which would otherwise interfere with the definition. Those which are attached to the mirror bar are known as the "iris." "conical," etc., and the amount of light furnished through them depends upon their distance from the object or the size of their aperture which is controlled by a milled head. Each has its advantages and either does good service if properly managed.

We have thus far considered the microscope with objectives suited to the necessities of the beginner, yet at some time in the future we shall find it necessary to use higher powers.

It is commonly the opinion of those not familiar with the study of animal tissues that it is simply necessary to place it in the focus of the objective in order to familiarize one's self with its structure. As a matter of fact under such circumstances it appears nearly homogeneous and the histological elements remain hidden, and objectives of sufficient power to show them are of such short focus that the object placed be-

neath it will not receive sufficient light to admit of being seen by reason of being shaded by the objective. It is, therefore, necessary, in order to properly study an object through a high power lens, that the object be transparent, that sufficient light may be transmitted through it from the mirror beneath the stage. In the case of most animal sections this can only be accomplished by cutting them exceedingly thin, yet the homogeneity to a greater or less extent remains, and unless proper means are taken to differentiate the elements it will be found impossible to derive a correct idea of their morphology.

Fortunately we have a solution of the difficulty through the process known as selective staining. Certain elements are found to readily absorb certain colors, leaving the others entirely free from stain. They in turn will each absorb certain other colors so that by repeated stainings the whole structure is finally differentiated, and, after being mounted in a proper medium can be thoroughly studied.

We will later on again refer to this subject, while in the meantime we return to the subject of methods. As the writer before remarked, it is necessary that the tissues be cut in thin sections in order to properly prepare them for study. This is accomplished by the use of an instrument called the microtome by the use of which sections can be cut which rival in thinness the most delicate tissue paper.

There are different patterns furnished by dealers in microscopical goods. They are known as machine and hand microtomes or section cutters. The former are often elaborate pieces of mechanism and are used chiefly by those histologists who make a business of preparing and mounting sections for sale. The latter are commonly used by students and others who wish to prepare sections for their own use and are excellent instruments for the purpose. However, should the student attempt to cut a section of tissue by use of a microtome without previous preparation he would at once find himself unable to do it successfully as animal tissue is for the most part too flaccid and yielding while the more dense portions such as the teeth and bones are by reason of calcification too hard. In

the one case recourse must be had to a process of hardening said process to be one which, while hardening does not distort, and thus convey incorrect ideas of form. In the other case it must be subjected to the action of some agent which, while it will decalcify, will not change the relation of the elements which make up the structure.

For soft tissues a two per cent. solution of bichromate of potassa in distilled water is of great use when it is advisable to harden slowly after which it should be transferred successively to alcohol of different degrees of strength—from sixty per cent. to absolute spirit. Where a more rapid hardening is desired it can be immersed in Müller's fluid, which at the same time that it hardens serves as a preservative. It is made by adding to the bi-chromate solution one per cent. of sulphate of soda. A one per cent. solution of chromic acid in distilled water is an excellent hardening fluid for some tissues, and it serves an excellent purpose in the process of decalcification of bones and teeth when used with a small percentage of dilute hydrochloric acid, for while the hydrochloric acid serves to decalcify, the chromic acid hardens the matrix.

AN IMPACTED WISDOM TOOTH.

BY CHARLES HARKER, M.D., D.D.S., MOUNT HOLLY, N. J.

I give the history of an impacted lower wisdom tooth which has some features not common to these cases.

A few months since a robust, healthful young man from the country came to my office with jaws almost set, having been for twelve weeks unable to open the mouth at any time wider than would admit the finger between front teeth. For ten weeks he had been under the care of a regular physician, whom not having given him relief, he had abandoned and called in a cancer doctor, the latter, having applied to the face in his treatment an escharotic (termed by him his bull-dog) which opened a hole through the man's cheek almost large

enough to pass in a finger to the roots of the tooth. A probe was readily passed in and contact with roots noted. Having, by my examination, determined cause of trouble a lower root forceps (Thomas' lower alveolar) was with some difficulty passed back between cheek and teeth and the offending organ extracted.

A syringe was then charged with fifty per cent. solution of phenol sodique, and with it the fluid was thrown into the socket, discharging itself through the opening in cheek.

The patient was directed to repeat syringing with ten per cent. solution daily after each meal for one week and then return to my office. Upon his return the swelling had almost subsided—the patient being able to take solid food with facility. Syringing after each meal was continued one week longer, the fluid used being tepid water. Upon his second visit the parts were found entirely free from swelling and the healing so far advanced as to require no further treatment.

In about six weeks from time I first saw patient, he presented himself at the office with jaw and fistula entirely healed but having two secondary, cold abscesses, each about as large as a hazel nut, located in the cheek muscles, (mainly between masseter and buccinator), about one and a quarter inches in front of angle of jaw. These, after being opened with lancet at lower margin, discharged about a drachm of bloody pus.

Phenol, fifty per cent. solution, was injected, and gentle pressure applied upon sacks until empty.

These secondary abscesses healed in a few days and the parts have remained perfectly healthful since.

None but the country dentist knows how frequently similar cases occur. This was a bad case, made so by lamentable ignorance on the part of the medical fraternity. And why? I regret to say that, during two courses of lectures in the leading medical school of Philadelphia I heard not a single word about diseases or surgery of the human teeth. And this, too, notwithstanding that every country physician is called upon to extract a tooth, perhaps fifty times as often as he is called upon to perform any other one operation in general surgery.

A METHOD OF MAKING AN ALL GOLD CROWN.

BY LOUIS P. DOTTERER, D. D. S., CHARLESTON, S. C.

Take a band of plate gold, 28 gauge, 22-k. fine, wide enough to extend from the cervical border to the cusp. If the root is broken or decayed, allowance will have to be made accordingly.

After soldering and fitting accurately to cervical border, grind off the points touched by antagonizing tooth. This will leave the buccal and palatal walls perpendicular.

To overcome this and make the work more artistic, these walls should be contoured by cutting several V-shaped spaces and joining the edges.

Lay a piece of pure gold plate, 28 gauge, upon this, and get patient to close the jaws—this will give a perfect articulation—bend over the lapping edges of the cap, and retain to band by a piece of binding wire.

Invest in plaster and marble dust, covering the cervical edge of the band to protect it from the flame, and flow upon the inside 20-k. gold solder sufficient to stiffen the cap and unite all edges.

Grind off surplus with a corundum stone, and polish in the usual way. Molars and bicuspid too frail or too tedious to fill can thus be preserved and made serviceable.

The Knapp blow-pipe is invaluable in this work, and the crown, as completed, should be set with an oxy-phosphate, preferably in my hands, dentoplastique.

DENTAL POSTSCRIPTS.

BY J. A. ROBINSON, D. D. S., JACKSON, MICH.

Some one has said that "reading maketh a full man," but the really full man is not made without thinking and work. To be a great reader is perhaps to be like a great sponge; and

such reading may benefit the individual, but no person is really great and full who does not benefit the world. The parasite, whether great or small, is of no consequence except to self. As I wish to talk about a number of little things, that of themselves are not enough to make an article for a dental monthly, I put all the little things together and call them *postscripts*.

Postscript No. 1. Mellott's fusible metal used for swaging caps is very nice for swaging the cusps for crowns; but it seems impossible to swage a piece of gold the whole length of any tooth without breaking off the tooth from the die if made with the metal, that is sold in the Melotte package; so I add one-twentieth part of tin to the block to be used for the male part of the die that is cast first; then lute well with prepared chalk to prevent the union of the two parts when pouring the other part of the cast, and you will add strength to the cast, and it will be sufficiently hard to swage coin gold for crown work.

Postscript No. 2. We sometimes find a root of a tooth that is decayed diagonally so that one-half of the root is decayed down to the alveolar process, and there is not sufficient surface to hold the band for a crown. Push the gum down with a piece of spunk for twenty-four hours and you can see the entire surface of the root: drill the hole as usual to receive the screw and prepare the root by cutting an *eccentric* cavity into the root, that is, make the cavity all on one side of the root that comes below the gum, then bend a platinum band as you would to take the measure of the root to make a gold band; put a soft pine peg into the hole you have drilled for the screw for the crown and fill the band with amalgam round the peg: let it remain two days to harden and you will have a good base for a Richmond crown.

Postscript No. 3. It is not an uncommon occurrence to find in the teeth of old persons the lingual surfaces of the front teeth or part of the front teeth worn down almost to the gums, while the faces of such teeth are in good shape. In such an event I swage a piece of thick gold and pivot it to the teeth

for mastication, and also to open the jaws sufficiently to receive a partial denture.

While crown work and bridge work is talked about as *new*, to those who were brought up to do gold work it does not seem new, but only an improved method of doing the work. I have some thick gold masticating surfaces that have been worn for years that have never given way or caused any trouble.

Postscript No 4. The inferior bicuspid is of vast importance to balance upper dentures. When they have become loose from pyorrhœa or any other cause, a gold band of suitable width swaged and driven tight to the cuspid (and if made of coin gold it can be driven to an exact fit), now take another band of the same width and bend to the bicuspid, leaving it open on the posterior side, remove and solder to band No. 1. Now, grind the crown of the bicuspid till it is as small as it is at the gum, bring the two ends of the band together and solder and you will have a double band that will hold the loose bicuspid firm for years. Where the lower molars are loose, wire them in position and with a fissure burr cut a slot between the loose and firm molars on both sides large enough to insert a silver dowel the thickness of a ten-cent piece and one-sixteenth of an inch in width and imbed with amalgam and you will save the tooth. Use silver instead of gold, as the amalgam has a stronger affinity for silver than gold, and it is firmer.

Dr. Harlan uttered an important truth when he said if you would cure pyorrhœa wire the teeth tight in position; and let me add, take off all occlusion by grinding the cusps of antagonizing teeth not only while tightening teeth, but where you have had any inflammation or diseased dental pulps. Treat such teeth as you would sick persons who need rest.

Postscript No. 5. Dr. J. H. Woolley, of Chicago, has invented a little instrument he calls a "root canal dryer." It consists of a copper cone and round copper broach to be inserted into the root canal to dry any moisture or serum that may remain from inflammation or suppuration.

I apprehend that it may assist on more philosophical principles than are set forth in his declaration, for while it is true that it is a dryer it is also true that heat is life. From the tiniest plant or flower struggling for existence in the field and woods to the first breath drawn by the new born infant that is warmed by carbonated hydrate combining with the oxygen in the air, heat is the life of all animate and inanimate creation, and the absence of heat is death. I have used Dr. Woolley's little invention in a few instances with perfect success. We hardly know how to express our admiration for a little dogmatism in our declarations that is interwoven in thoughts about new things and also in teaching and recommending new methods to accomplish desirable ends; and we really think a little of that commodity does more good to the age and generation in which we live than so much generalization that never imparts any enthusiasm to the general reader of dental literature or the dental practitioner to inspire him to try the new methods that are brought before the profession.

FOR SORE LIPS.—Dr. Hess, in the *Medical World*, gives the following:

R̄	Zinci sulphat.,	-	-	-	gr. xx
	Plumbi acetat.,	-	-	-	gr. x
	Pulv. kino,	-	-	-	gr. x
	Acid tannic,	-	-	-	gr. v
	Aquæ,	-	-	-	ʒj.

M. Sig.—Apply frequently.

SICK HEADACHES.—The following will be found very efficient in sick headache accompanied with nausea:

R̄	Ac. tartar,				
	Sod. bicarb.,	āā,	-	-	gr. x
	Caffein citrat.,		-	-	gr. j.

M.—Six grains in two or three tablespoonfuls of water, and drink while effervescing.—*Havilaud*.

SOCIETIES.

PYORRHŒA ALVEOLARIS.¹

BY C. G. JUNKERMANN, M. D., D. D. S.

Mr. President and Gentlemen of the Wisconsin State Dental Society :

One of the most common errors into which the dental profession has fallen, is that of designating, considering and treating pyorrhœa alveolaris as a disease. Pyorrhœa alveolaris is not a disease, but a symptom of a disease. The disease which we, as dentists, at least many of us, have erroneously called by the name of its most prominent symptom, is chronic suppurative periodontitis. Is chronic suppurative periodontitis a disease, *per se*? Locally considered, it is; but it rarely, if ever, exists in a healthy individual: there is generally at the base of it a constitutional derangement or disease, of which chronic suppurative periodontitis is one of the local expressions, and hence, when a dentist or physician speaks to me of a case of chronic suppurative periodontitis, I consider it a perfectly rational question to ask him: "What is the matter with the patient?" for in telling what he has, he has but told me of the local expression, and I am left to conjecture as to the disease proper with which the individual is affected; and I wish especially to emphasize this point, because I think that many cases of failure in the treatment of this affection are due to the fact that they are treated locally only and no account is taken of the constitutional causes which lie at their foundation and superinduce the local expression; and in view of the fact that even our best efforts and most skilful treatment, local

¹Written for the Wisconsin State Dental Society, Milwaukee, July, 1887.

and constitutional, frequently prove wholly inadequate to effect a cure, and we are forced to see tooth after tooth sacrificed to the ravages of the disease, while we stand by utterly powerless to prevent it, it certainly is worthy our consideration that we employ every agency at our command to decrease the ratio of failures.

With these few general remarks, let us now look at the causes, which are divided into constitutional or predisposing and local or exciting.

CONSTITUTIONAL CAUSES.—These are numerous, but have one thing in common, which is that all of them reduce the tone or power of resistance to local irritation; a local irritant which would be thrown off by nature in a healthy state, will, when any of these diseases are present and active, be sufficient to cause, or at least precipitate, the local trouble. Most prominent among the diseases entering into the causation of chronic suppurative periodontitis are:

1. *Mercurialismus*, i. e., mercurial salivation; undoubtedly mercury is frequently a factor in the causation of chronic suppurative periodontitis, but I hold that mercury is often more sinned against than sinning. In the treatment of no disease is mercury more frequently and freely administered than in syphilis, and probably next in typhoid fever, and then when a case of chronic suppurative periodontitis is set up, we say that the mercury is responsible for it, and seem to lose sight of the fact that these diseases furnish the very conditions most favorable to the causation of the local disease under consideration; and often when these diseases are treated *sans* mercury, the result is the same as to the local affection. Syphilis is essentially a disease of the tegumentary and osseous systems; the teeth belong to the tegumentary structures, and naturally come in for their share of the disease. And hence, I think it safe to estimate that fully 50 per cent. of the cases attributed to mercury are in reality due to syphilis.

2. *Scorbutis*, or scurvy (as it is more commonly known) is a frequent cause, as evidenced by the prevalence of chronic suppurative periodontitis among seafaring individuals.

3. *Phosphor Poisoning* is a frequent cause, as evidenced by the frequency of occurrence of the local disease in individuals employed in match factories, etc.

4. *Saturnismus*, or lead-poisoning, is also a frequent cause, as it is well known to act directly on the gums, giving the characteristic blue lines along their margins which symptom plays such an important role in the diagnosis of lead poisoning.

5. *Scrofulosis*. Although this term has long been boycotted by the medical fraternity, still we are constrained to use it in default of a better term to indicate that tendency to suppuration of the glandular system, reducing the resistive power of nature and predisposing to inflammatory action.

6. *Tuberculosis* is a cause, owing to the degenerated condition of the system, the reparative power being almost *nil*.

7. *Syphilis* is a very frequent cause, for reasons above stated.

8. *The exanthemata*: Typhoid fever, scarlatina, measles, small-pox, etc.

9. *Rheumatism*.

10. *Malaria*.

11. *Gout*.

12. *Senility*.

13. *Excessive Mental Strain, Reflex Neural Excitation*, and in fact any of the diseases which reduce the inherent force of resistance to irritants are likewise factors of causation, for an individual may have any or all (if that were possible) of the above constitutional diseases, and yet not have a sign of chronic suppurative periodontitis. A local, exciting cause is, in most cases, essential to focus the disease. It may be so slight a thing as an over-full plug; faulty occlusion; recession of the gums, exposing the roots of teeth to the unhealthy secretions of the mouth; salivary and sanguinary calculi; alveolar abscess; trauma; a ligature left around the tooth; a regulating appliance; a dental plate, etc., any one of which would in itself be incapable of producing suppurative inflammation did it not find the system in an atonic condition and predisposed to it.

DIAGNOSIS.—The diagnosis is easy; a glance and a touch will suffice. There is the pus flowing from the alveolus, the soreness to the touch; the tooth is loose and raised in its socket, the gum separated from the tooth, etc. But this is not sufficient; if we propose to treat constitutionally, we must find out the nature of the constitutional cause. This is usually easily obtained, or at least a clue thereto, from the individual, and the skilful dentist will not often find it difficult to ascertain the cause; but in some cases, where syphilis is at the base of it, the patient will often use every means to throw the dentist off the scent, and thus it is often necessary to use the utmost precaution and have the greatest familiarity with the various manifestations of the disease, not to be victimized into an incorrect diagnosis and consequent failure in the treatment. The limits of this paper preclude a more detailed account on this head.

THE PROGNOSIS.—This depends altogether on the disease causing the local affection. If you can treat (or cause to be treated) successfully the constitutional cause, you will often, though by no means always, effect a cure.

The duration of the disease is essentially chronic, and the length of time will depend largely upon the fundamental disease, or I might add, the forceps.

TREATMENT.—The constitutional treatment will, of course, vary in accordance with the cause; but will, in nearly all cases, consist of tonics, a proper diet, hygienic measures, and in cases where we have a direct specific for the cause, in the administration of such remedy. There may be said to be seven cardinal tonics at our disposal: Quinia, iron, strychnia, arsenic, phosphorus, cod-liver oil and electricity, and of these the one most suitable to the case should be employed. If the disease were due to phosphor poisoning you would not, of course, employ phosphorus as a tonic, unless you are a believer in the doctrine of *similia similibus curantur*.

If the disease be a local expression of tuberculosis or scrofulosis, the best tonic to employ would be cod-liver oil. If due to lead-poisoning the tonic indicated would be electricity;

and of course it would often be well to combine two or more of these tonics. Quinia is almost always indicated in chronic suppurative periodontitis from any cause, and might be called the king of tonics where inflammatory conditions exist, in that it limits or prevents the migration of the white blood corpuscles, without which there would be no pus. Phosphorus would be indicated where mental and neural affections enter into the causation. Iron in anæmia, etc., arsenic and quinia in malaria, etc. Other drugs are also indicated. In mercurialismus, whether caused by administration of mercury for syphilis or otherwise, the iodide of potassium should be given in large doses, and this drug would also be probably the best, at least good and legitimate in lead-poisoning. In syphilis the iodide of potassium holds the rank of a specific. It does not come within the scope of this paper, however, to indicate the detailed constitutional treatment in each of the constitutional diseases which lie at the foundation of chronic suppurative periodontitis. I have simply named a few examples to show that the line of treatment indicated for the fundamental disease is that which should in all cases be employed in order to effect a cure of the local affection, for without constitutional treatment the dentist may as well at once proceed to employ the balm of steel.

The *diet* should be nutritious and easily digestible, consisting of soups, lean, well-cooked meats, succulent vegetables, fruits, and proper beverages, etc.

The *hygienic measures* should consist of ample daily outdoor exercise, walking, horse-back riding, etc. I am sorry that I cannot remember who it was that said, "The *outside* of a horse is the best thing for the *inside* of a man." The sleeping room should be well ventilated day and night, summer and winter. Frequent baths should also be prescribed.

The *local treatment* consists in the removal of the irritant, and in cleanliness and protection of the affected organ. All tartar should be at once removed, and the tooth socket thoroughly syringed out with per-oxide of hydrogen or some other detergent. This may be done by employing a hypodermic

syringe, the point of which will usually readily pass between the tooth and the margin of its socket, and the fluid can be injected with sufficient force to thoroughly wash away all débris and pus from the socket, which may then be protected, in a measure, from the invasion of particles of food by the application of a little collodion about the margin of the socket. The application, not oftener than once a week, however, of aromatic sulphuric acid, in full strength, will prove very beneficial, in that it will dissolve any tartar which may have been left, and also by sometimes setting up an acute inflammation in substitution for the chronic, and causing adhesion of the peridental membrane; and it will also act as an antiseptic. The affected tooth should be relieved of undue pressure, and this often necessitates the wearing of a cap over several of the back teeth to prevent occlusion for a time. If the tooth pulp be dead, the tooth should be thoroughly opened and débris of pulp removed. Another factor of vital importance in the local treatment is that of free blood-letting; scarify the gums, freely and often, until they resume the natural pink color instead of the dark congested appearance which is usual in this affection.

The pathology of this disease I have purposely avoided consideration of, inasmuch as it has been discussed to such an extent that it is worn threadbare.

In closing, let me say that if I have succeeded in impressing upon you the necessity for constitutional treatment in this great bug-bear of the dental profession, commonly—though erroneously—spoken of as *pyorrhœa alveolaris*, the chief aim of this paper will have been accomplished.

A FEW SPECIAL HELPS IN CLINICAL PRACTICE.¹

And first of all, let me impress upon your minds the great value of a reliable saliva ejector. Since the perfection of all

¹Extract from Dr. G. A. Bowman's paper read before the Missouri State Dental Association, Kansas City, June, 1887.

our operations in the mouth really depends upon the control of this insidious enemy—your patients will rise from your chair to bless you, for your efforts to make them as comfortable as possible. Use glass tips, perforated only on the side, and keep them immersed in dilute nitric acid when not in use, which will keep them clear, pure and clean; and be sure you give each patient a fresh one. I want to emphasize this point, without which the use of the ejector would be disgusting to your patient and embarrassing to yourself. No reasonable sum would deprive me of its use.

Presuming that every one uses the rubber dam, and finds some cases where it is difficult to apply it, a suggestion covering these cases, possibly, may be pertinent. On teeth not fully erupted, or where the form of the tooth makes the retention of the dam with ordinary means difficult, string a couple or more of small beads on a ligature, securing each at a point which will bring a bead on the lingual and another on the buccal surface of the tooth. When tied around the same, pass the dam over these beads, which will securely hold it in place. To apply the dam in ordinary cases—to wit, suppose the superior bicuspids to be operated on—embrace within the dam first molar, bicuspids and cuspid. Insert the clamp in the perforation intended for the molar and apply it. This anchors your dam and affords assistance to the force necessary to cover the anterior teeth; pins or ligature may be inserted by your assistant, as the dam is drawn forward to place.

These flattened pins are the invention of our German brother Herbst, as also is the excellent way of securing clamps in position when operating on cervico-labial cavities.

The ring, or open-faced clamp, is adjusted, forcing dam and gum above the cavity, and then secured by moulding a small piece of modeling compound over clamp and contiguous teeth. It hardens immediately, and the satisfaction of operating on these cases thus secured must be experienced to be fully appreciated. A small fork, easily made from an excavator or stout wire, by any one, is an efficient aid in adjusting the ligature or rubber rings in any position and for any purpose in the

mouth. There are cases where it is impossible to adjust the dam. Moisture may be excluded by painting the gums, previously dried, with tincture of benzoin. It closes every open mouth, and will enable you to make quite protracted operations. Punctures and other leakages in the dam may be effectually closed by placing a piece of spunk dipped in chlora percha, or by inserting closed eyelets or minute pieces of cork, all of which should be ready for instant use.

The Ingersoll bottles are indispensable for convenient use of chlora-percha, shellac and sandarac. The glass covers dressed with glycerine secure the most volatile substances, and yet may be easily removed. All glass stoppers treated with a coat of glycerine are cured of sticking.

Glycerine is preferable to oil on disks and burnishers, and indispensable in using chlora percha for root fillings, and for a coating on instruments while working the plastics.

Teeth divested of moisture are less sensitive, therefore it is good practice to adjust the dam as soon as good access has been made, and much time saved especially with patients who love to hear themselves talk. Caustic potash is an efficient obtundant, though somewhat painful on first application, which lasts but a moment. Herbst's formula, 1 drachm sul. acid, 30 grains cocaine, sul. ether to saturation in open vessel.

Parmely Brown's "heroic chisels" are valuable to cut down enamel walls, and in dressing cervical margins are great time savers. Work with, and prove all your work with a strong magnifying glass, and he who does not use one, little knows how many imperfections he covers up for the time being, only to crop out later in life to condemn his carelessness. Time spent upon marginal walls will be amply repaid in the consciousness of having done your whole duty, even if you make a smaller financial showing at the close of each day.

Perry's separators are worth their weight in gold many times over, enabling us to discover defects and remove them with greater satisfaction to both patient and dentist. They are valuable for supporting teeth (which have been wedged by the

slow process) during the filling, thus preventing much pain. Fillings can be properly contoured by their use. The set may seem expensive to some, but get a D. separator (if you can) first (this is used on the incisors), and 'pure love for it will make the way easy to obtain the others. The practicability and advisability of using matrices is questioned by some, and branded as a delusion and snare, but I think a judicious use of some of the forms offered us is a great help, and many hitherto difficult operations are by their use rendered simple. I have used Jack's, Kroeger's, Miller's and Herbst's and find all useful.

NEW JERSEY STATE DENTAL SOCIETY.

The seventeenth annual convention of the New Jersey State Dental Society is a thing of the past—it has passed into history, its record is made—and while it was a moderately successful session, still there was nothing done or accomplished to mark it as a brilliant affair—such as the society has established a reputation for in the past.

The convention opened on Wednesday morning, July 20, in the ball-room of the Coleman House, Asbury Park, with prayer, and after the usual routine business the President, Dr. Eaton, delivered the annual address, which was attentively listened to, especially where he touched upon the relation of dentistry to medicine, giving it as his opinion that dentistry was in no way related to medicine, was under no obligations to it—wanted nothing from it, and discouraging support of the Dental Section of the International Medical Congress next September. There were several other recommendations in the address, but of no general interest to any but members of the society. The address was referred to a committee to take action on its suggestions, which it did and reported that it was unable to agree in regard to that section concerning the International Medical Congress. The question then came before the society—whether that section should be

adopted or not—(its adoption carrying with it the endorsement by the society of the President's views). After a little discussion a motion was made to lay it upon the table indefinitely, which was carried by a decided vote.

The afternoon was devoted to clinics, the principal one being given by Dr. Geo. M. Evans, of New York, who demonstrated his method of making and attaching metal crowns and bridge work. His method of making contour crowns was very simple and effective. Also his method of crowning incisors with porcelain crowns, where the pulp is still alive in the root. He also exhibited a very simple instrument for drying out the roots of teeth when undergoing treatment, and as a part of the treatment—it consisted of a silver probe about the size and shape of an ordinary excavator, drawn out to a fine point and slightly bent at the end. About an inch and a half from the end was a large mass or bulb of the same metal, which he heated thoroughly and then by passing the end into the root to the apex he was able to convey a great amount of heat there. I understand that the doctor is soon to put before the profession a paper detailing his methods, which will make interesting and instructive reading.

Dr. E. T. Starr, of Philadelphia, was also on hand with his method of constructing crowns, and Dr. Welch gave a clinic of an automatic vulcanizer.

In the evening Dr. E. Palmley Brown read a paper descriptive of his bridge and crown work. It was followed by one from Dr. F. M. Odell. A good deal of discussion followed, which was participated in by Drs. Frank Abbott, H. A. Parr, Watkins, Jackson and others.

The session on Thursday morning opened with a paper by Dr. B. F. Lucky on the "Treatment of Pulpless Teeth," who was followed by Dr. Frank Abbott with one on "Deciduous Teeth." An animated discussion followed. Drs. C. S. Stockton, Hayhurst, Watkins, Abbott and Luckey taking part.

In the afternoon Drs. C. C. Carroll, of Meadville, H. A. Parr, of New York, and J. G. Morey, of New York, gave clinics.

Dr. Carroll gave an interesting description and demonstration of his method of making cast aluminum plates and bridge work. It seems to be easy of manipulation, the work seems strong, is very light and non-oxidizable. I see no reason why it should not become popular.

Dr. Parr, whose ability as a crown and bridge worker is so well known, inserted two cental incisors for a patient, performing his work in a rapid and beautiful manner.

Dr. Morey exhibited his removable bridge work and porcelain faced crowns; also his new separator.

In the evening Dr. G. Carleton Brown read a paper on the "Natural Food of Man," which displayed a good deal of thought and patient research. It was discussed by Drs. R. B. Winder, R. Finley Hunt, Hayhurst and others.

Friday morning was devoted to routine business and the election of officers. Dr. G. Carleton Brown being elected President; H. A. Hull, Vice-President; C. A. Meeker, Secretary, and G. C. Brown, Treasurer.

On Friday evening a complimentary hop was given to the society by the proprietor of the Coleman House, which was enjoyed by those members who had not left for home; so ended the seventeenth meeting of the society, and I hope that as each member reflects on the work of the session he will not only see, but feel the necessity for individual work. There are too many who are willing to let others do the thinking and writing; the result is shown in our having but three papers. If there is not more interest shown it is not hard to predict what will be done, or rather what will not be done next year.

LUCKEY.

MISSISSIPPI STATE DENTAL ASSOCIATION.

The Twelfth Annual Session of the Mississippi State Dental Association was held at Meridian, Miss., May 17, 18 and 19, 1887.

The meeting was well attended by members of the associa-

ation, as well as by many of the profession from across the line in Alabama and also from Tennessee.

Interesting communications were read from Dr. J. Hall Moore, of Richmond, Va.; Dr. Dotterer, of South Carolina; Dr. W. H. H. Thackston, of Virginia, and Dr. O. A. Rawls, of Kentucky.

Essays were read by the following gentlemen :

Dr. W. T. Martin, Yazoo City, "Three Types of Gum Disease;" Dr. C. C. Crowder, Kosciusko, Miss., "Duplicating Rubber Plates;" Dr. Robert Russell, Nashville, Tenn., "The Injurious Effects to the Human System from Wearing Vulcanized Rubber Plates;" Dr. G. H. McCulloch, New Orleans, La., "Value of Microscopy in Dentistry" demonstrated by sections exhibited under the microscope; Dr. J. B. Askew, Vicksburg, Miss., "Some of the Disagreeable Things incident to Dentistry."

These papers were ably discussed by the members and visiting brethren.

From day to day new names were added to the roll of members, Dr. Robert Russell, of Nashville, and Dr. J. G. McCulloch, of New Orleans, being elected honorary members.

Clinics were held during the meeting, and all the new things in dentistry ably demonstrated.

The following is a list of officers for the ensuing year :

President, Dr. Geo. B. Clement, Macon; First Vice-President, Dr. A. A. Dillehay, Meridian; Second Vice-President, Dr. R. K. Luckie, Holly Springs; Third Vice-President, Dr. S. R. Wyse, Aberdeen; Recording Secretary, Dr. A. H. Hilzim, Jackson; Corresponding Secretary, Dr. E. E. Spinks, Meridian; Treasurer, Dr. C. C. Crowder, Kosciusko.

The President appointed the following committees :

EXECUTIVE COMMITTEE.

Dr. E. E. Spinks, Meridian; Dr. D. B. McHenry, Grenada; Dr. R. K. Luckie, Holly Springs.

SECTIONS.

SURGICAL DENTISTRY.—A. H. Hilzim, W. H. Marshal, W. H. Morgan, Nashville, "honorary member."

PROSTHETIC DENTISTRY.—D. B. McHenry, K. S. Moffatt, G. H. Magruder.

PHYSIOLOGY AND HISTOLOGY.—Morgan Adams, John G. McCulloch, New Orleans, honorary member; Geo. W. Rembert.

PATHOLOGY AND THERAPEUTICS.—A. A. Dillehay, J. D. Miles, J. B. Rembert.

MATERIA MEDICA.—S. R. Wyse, Henry Robinson, W. T. Allen.

DENTAL METALLURGY.—W. W. Westmoreland, H. H. Wofford, C. R. Rencher.

DENTAL CHEMISTRY.—W. T. Martin, E. E. Spinks, S. P. Nash.

EDUCATION AND LITERATURE.—J. B. Askew, R. Russell, Nashville, honorary member; A. D. Lamkin.

INCIDENTS IN OFFICE PRACTICE.—C. C. Crowder, J. E. Suber, G. A. Warwener.

Two vacancies on the Board of Dental Examiners of the State were filled by the election of Dr. A. H. Hilzim, of Jackson and W. W. Westmoreland, of Columbus.

Mr. J. W. Selly, representing the S. S. White Company, was present with a handsome display of goods, and delivered an interesting address, setting forth the great advantage accruing to all who would attend the meeting of the Southern Dental Association at Old Point Comfort, and the Medical Congress at Washington.

Morrison Bros., of Nashville, and J. P. Albam & Co., of Memphis, also made fine displays of goods and reaped a harvest of golden grain from the dentists present by the sale of the same.

The next annual meeting will be held at Grenada, Miss., the third Tuesday in May, 1888.

COLORADO STATE DENTAL SOCIETY.

During the last winter while the Legislature was in session, there was an effort made to pass a dental law, but a failure to agree as to its provisions by the dentists, opened a little breach; so nothing was done; but to be prepared and organized for the passage of a good law by the next Legislature, the graduates and advanced dentists filed articles of incorporation. Out of that act grew the formation, on June 7, in Denver; the "Colorado State Dental Society," having now twenty members, and inviting all the dentists in the state to become members who can pass a satisfactory examination and will subscribe to the constitution, by-laws and code of ethics. The following doctors constitute the offices for the ensuing year:

President, Wm. Smedley; first vice-president, John Grannus; second vice-president, W. B. Rogers; corresponding secretary, J. N. Chipley; recording secretary and treasurer, H. P. Kelley.

COMMITTEES.

Membership—Drs. Porter, Bradner and Sinton.

Executive—Drs. Norman, Watson and Beals.

Publication—Drs. Smith, McClara and Hartung.

Committee to establish a dental department in connection with the medical department of the University of Denver—Drs. Smedley, Grannus, Rogers, Chipley, Kelley, Norman, Robins, Porter and Smith.

The membership fee is \$5, annual dues, \$2.

The 8th was devoted to talks, essays, discussions and a short clinic.

Dr. P. T. Smith, of Denver, by the aid of several drawings aired his pet theory of Primate Forms, Force, Matter, etc.

Dr. S. Davis, of Denver, read a short paper on "Abscesses and Filling of Roots."

That proved to be here as in the East a very prolific subject for discussion, some urging immediate filling, others, and the

majority, delayed and treated before filling. To show you that the dentists here are not the followers of any one man or school, the materials used for root filling are noted.

Dr. Smith fills with amalgam, Dr. Beal, with gutta-per. or phos.; Dr. Porter, with gold and at once; Dr. Davis, with gold at apex and gutta-per.; Dr. G. H. Hartung, with phos.; Dr. Chipley, with gold, phos. and amalgum; Dr. W. K. Sinton, with gutta-per. and wood; Dr. W. F. Bradner, with gutta-per. rubber and phos.; Dr. Grannus, with gutta-per.; Dr. Watson, with gutta-per.; Dr. Norman, with gold.

Dr. Porter spoke upon the "Care of Children's Teeth," considerable discussion was elicited.

Other essays were read, and after a pleasant meeting the society adjourned to hold its next annual meeting in Denver the first Tuesday in June, 1888.

ROBBINS.

RESOLUTIONS.

ADOPTED BY THE CHICAGO DENTAL CLUB, JUNE 27, 1887.

WHEREAS, At the last annual meeting of the American Medical Association held in this city a resolution was passed recognizing the graduates of all dental colleges which require a thorough course of instruction in all the fundamental sciences which underlie medicine and surgery, equal to the standard required by the best medical colleges of our land, as entitled to membership in this association with all its privileges, and

WHEREAS, Our honored friends, Drs. N. S. Davis and W. W. Allport, of this city, were largely instrumental in bringing about this action of the association, and

WHEREAS, Both of these gentlemen have always taken an active interest in promoting higher education among dentists and were also largely instrumental in the establishment of dental chairs in the medical colleges of our city, and the section of dental and oral surgery in the International Medical Congress, therefore be it

Resolved, That we, the members of the Chicago Dental Club, express our appreciation of their untiring efforts and devotion to the cause of higher professional education and the elevation of our "specialty" to the position which its scientific attainments deserve.

Signed,

JOHN S. MARSHALL,
A. E. BALDWIN,
J. AUSTIN DUNN,
Committee.

SOUTHERN DENTAL ASSOCIATION.

The meeting of the Southern Dental Association at the Hygeia Hotel, Old Point Comfort, Va., August 30, promises to be a grand success if not the largest meeting of the dental profession on the continent. The Central Traffic Association as well as the Southern Passenger's Association will give reduced rates to those who wish to attend. Those purchasing tickets from Central Traffic Association will get tickets from railroad agent when procuring tickets which will enable the holder to return from "Old Point" for one-third fare.

Those who wish to take advantage of the reduction offered by the Southern Passenger's Association will apply to Dr. J. Y. Crawford, corresponding secretary, Nashville, for certificates which will enable the holder to make the trip by paying one and one-third fares. Tickets good twenty-four hours after adjournment of the meeting.

The Virginians and our noble grand old president, Dr. W. W. H. Thaxton, are exerting themselves to make the meeting a grand one.

A cordial invitation is extended to all, East, West, North and South.

Nashville, Tenn.

J. Y. CRAWFORD,
Cor. Sec.

TRANSLATIONS.

ALVEOLAR ABSCESES AND METAL DRAIN TUBES IN THE TREATMENT OF THE SAME.

Translated from (*Le Progrès Médical*) by H. MUETZE.

Mr. Magitot says—he has written this a long time ago—that alveolar abscesses have two different origins.

1. The dental follicle becomes a cyst in its embryonic state, its wall forming the coat of the sac. The contents of the follicle though are always found on the bottom of the cavity, whenever the evolution of the abscess takes place.

This class has been called follicular abscesses with several subdivisions as embryoplastic, odontoplastic and coronary, according to the stage of development of the organ enclosed in the follicle. They are the odontomes of Broca.

2. The periosteum, which surrounds the root of an adult tooth, rises under the influence of an inflammatory condition, and becomes an abscess wall, whereas the apex of the root, denudated and partly absorbed, invariably occupies the center and bottom of the sac.

In regard to the mode of development of follicular abscesses, all surgeons seem to agree, but it is not the case with the so-called periosteal abscesses. Messrs. Verneuil, Reclus and Malassez, referring to the constant presence of an epithelial layer on the inner surface of the abscess wall, have refused to the periosteum that exclusive role which M. Magitot attributes to it. They claim that epithelial, embryonic *débris*," which are so frequently found in the alveoli of adults, are the cause of these abscesses, whence the name of peridental (Verneuil and Reclus) and paradental abscesses (Malassez). Which

is the best treatment of alveolar abscesses? One method, which was quite usual last century and in the beginning of this, consisted in totally or partly removing the abscessed maxilla. Another method, that of most of our surgeons, consists in cutting a large opening into the abscess through the bony portion. This latter method gives excellent results, but it causes unnecessarily larger or smaller deformities of the operated part. The method of using metal drain tubes of a small diameter gives good results. These tubes are of different diameters, but all very small. The finest ones don't measure more than two millimeters in diameter.—*L'Odontologie—Le Progrès Médical*.

FROM the *Pharmaceutical Record* we learn that "Brieger calls ptomaines all bases which are due to the action of bacteria; the poisonous bases he calls toxines." Gutieri calls all bases which are due to fermentation or putrefaction or bacteria alkaloids, or ptomaines; and all bases of the living body as well as of the urine, bile, saliva, snake-poison, he calls physiological alkaloids, or leucomaines (for instance, xanthokreatinin, chrysokreatinin, amphikreatin, pseudoxanthin). Bouchard has experimented to determine the quantity of bile, urine, or any other excretion which is necessary to kill one kilo of rabbit. This quantity he calls toxy, and has in this way obtained a urotoxy, choletoxy, etc. The name ptomaine (due to Selmi) Dr. Robert proposes to alter into ptomatine, as being now correct.—*National Druggist*.

PERHAPS the most valuable result of all education is the ability to make yourself do the thing you have to do, when it ought to be done, whether you like it or not; it is the first lesson that ought to be learned; and, however early a man's training begins, it is probably the last lesson he learns thoroughly.—HUXLEY.

CORRESPONDENCE.

DIG OR DIE.

CHICAGO, ILL., June 25, 1887.

EDITOR ARCHIVES—In your April issue, under the *nom de plume* of "Dentatus," a gentleman sets forth some startling plans for the revolution of dental colleges, their management, examinations, etc. He bravely wades in and suggests a panacea for all the ills to which a dental college is heir, and, from the tenor of his article the depredations, from which he has so severely suffered.

He in no uncertain tones stigmatizes the profession of dentistry as one in which a young man is least likely to succeed, claiming that a large majority are only able to "eke out a bare hand to mouth existence."

The most inelegant proposition is his ominous insinuation upon the faculties of these colleges, presumably those of the Chicago colleges. He claims that these faculties hold out inducements for young men to enter the profession, and says he: "Their reasons for holding out such encouragement, false though it be, I will not name."

I have waited for some older and abler alumnus to refute these imputations, but not having heard of or seen any up to date I would be untrue to my Alma Mater, unkind to her corps of qualified teachers and false to my profession did I not even at this date make some effort to stamp the allegations in that article as unfair and unjust. He claims that forty young men have recently graduated from the Garden City. Thirty-seven of those young men of whom he speaks graduated from one college while the remaining three came from the two other colleges that have their residence in this city.

While I do not know anything of the two colleges referred to I have no good reason to believe that they should be made subjects of the gentlemen's odium. However, my defense shall be for the college which had thirty-seven graduates and from numerical standpoint is entitled to it.

I do not like the unmanly insinuation as offered in aforesaid letter under cover of a *nom de plume*, upon such gentlemen as compose the faculty of the college in question.

So far as I know, and I can speak for a large majority of the class, no man was inveigled into the study of dentistry by any of the faculty. No special inducements were offered. Advice was solicited from members of the faculty in whom young men had implicit confidence and the advice weighed and acted upon *ad lib*. Each student, as far as I know, entered college and stuck to its curriculum of his own volition, knowing as well as one can, of the fight that lay before him after his graduation.

I claim that the sweeping insinuation is one that savors of injustice to the faculty of the college in question. Far be it from our intention to uphold any such condition of affairs as represented in the gentleman's letter, but we feel it incumbent upon us to at least defend those who are so dear to us and who so richly deserve it.

As a matter of fact what has been the outgrowth of these young men who matriculated in a dental college? Thirty-six out of the thirty-seven have comfortably and profitably located themselves in what gives good promise of lucrative positions. Compare, if you please, a like number of law or medical graduates with the thirty-seven of dentistry, and we must admit that the dental profession has a shorter road to pecuniary success than either of the above named.

As to the elevation of the profession, that remains largely with the individual. We think that if our friend would read Dr. C. S. Stockton's address published in the April issue of the ARCHIVES on the "Elements of Success," the bitterness of failure would be sweetened by the swallowing and assimilation of a few of Dr. C. S. Stockton's axioms. The gentleman claims that these forty young men were "thrown upon the

mercy of a cold and unappreciative world to dig or die, succeed or fail as the case may be."

Truly spoken. We must dig or die. No dig, no success. Success should not attend us unless we dig for it. True success never comes without a pile of digging.

A better watchword, but possibly a more elegant one, could not be inscribed upon the banner of the class of '87 than "Dig or Die."

Words containing no more solace nor more sentiment should be spoken to him, who having entered such a profession as dentistry with its promising possibilities and failed than "dig or die."

CHAS. E. BENTLEY, D.D.S.

COCAINE AND CARBOLIC ACID AS USED IN DENTAL OPERATIONS.

ST. LOUIS, July 24, 1887.

EDITOR ARCHIVES.--During the past six months it has been my pleasure to use a mixture suggested by Prof. Vian, of Paris, France.

The formula of this mixture is as follows: Eight drops of a 2 per cent. solution of carbolic acid and $\frac{3}{4}$ gr. cocaine. This is to be mixed at time of using, and applied hypodermically.

I have used it in every case where a local anæsthetic was demanded. The only sensation of pain that is felt, is that produced by the introduction of the hypodermic needle. What good the carbolic acid solution does, is not known, only this fact is apparent, we get much better results than from the use of the cocaine alone. It has been said that the use of the carbolic acid solution without the cocaine will give very good results, but I have never obtained them.

Perhaps I may be better understood if I give the results of some few cases. Dr. Henry Fisher having referred to this mixture in a paper on extraction, read before the Missouri State Dental Association, was very desirous of having it brought more prominently before the members, and requested me to

give a clinic. I had taken with me some of the carbolic acid solution $\frac{3}{4}$ grs. powders cocaine and the hypodermic syringe and gave the following clinics.

CLINIC 1.—Dr. Bland, Troy, Mo. Left superior wisdom tooth. I made a mixture of 8 drops of a 2 per cent. solution of carbolic acid, and $1\frac{1}{2}$ grs. of cocaine, mixed at the time of using. Injected hypodermically at a point between the free margin of the gum and the neck of the tooth, forcing the needle just as far toward the end of the root as possible without pushing the point through the gum, then injected one-half of the 8 drops into the tissue, doing the same on the other side of the tooth to be extracted. After injecting I placed my finger on the opening for a few seconds; then had the patient wash out the mouth with cold water. This was to prevent the cocaine mixture from getting over the mucous membrane and producing anæsthesia of the entire surface of the mouth and lips. After the injection, waited from four to six minutes, and then extracted the tooth, which Dr. Bland said was done without pain of any kind.

CLINIC 2.—Dr. Neeper, Bethany, Mo. Right superior wisdom tooth slightly decayed, and in bad position. Proceeded the same as in clinic 1, same amount of carbolic acid solution and $1\frac{1}{2}$ grs. cocaine; same result. No pain. This was an interesting case, as the patient allowed me to force the forceps up to the process and remove them, in order to observe the sensation. I moved this tooth from side to side to break up the attachments, asking him between each movement whether it hurt him. No pain at any time.

CLINIC 3.—Dr. Mahon, Chillicothe, Mo. Posterior root. Left inferior second molar. Teeth so close at the crown surface that root had to be taken out from the side. Proceeded the same as in clinics 1 and 2, with this exception, used $\frac{3}{4}$ gr. cocaine instead of $1\frac{1}{2}$ grs. as in the preceding cases. No pain.

These gentlemen are members of the association and gave their experience when the clinics were discussed.

Since my return home I have operated many times without

one failure. These operations include extracting teeth, lancing abscesses, etc. The most important operation was that of removing a deeply imbedded right superior central.

I expect to give a report with cuts of this case to the profession at some future time.

In conclusion I would say great care should be exercised in using this mixture; $\frac{3}{4}$ gr. cocaine and 8 drops of a 2 per cent. solution of carbolic acid, will do the work, and I think for the present, no more should be used at any one time. There may be some danger, and all the symptoms should be watched and carefully reported. I give this caution as we see cases reported where injury has been done by carelessness in using cocaine.

In my practice so far there seems to be some excitation, or as it has been called, cocaine intoxication.

This mixture is a God-send to dentists and should not be abused, as there is no telling to what extent it may be carried in relieving pain.

WILLIAM CONRAD, D.D.S.

INTERNATIONAL CONGRESS.

As I am unable to continue the work of the secretaryship of the Dental and Oral Section of the International Medical Congress, Dr. A. M. Dudley, of Salem, Mass., has kindly consented to act. All communications should henceforward be addressed to him.

E. A. BOGUE.

THE frothy substance which is often found on grass, and popularly known as "frog-spittle," has no connection with that animal. It is caused by a little insect which secretes a viscid, transparent fluid, with which he is completely covered. To enable him to breathe, he reaches out a pair of legs, and, enclosing a little bubble of air, brings it down, and afterward allows it to escape into the liquid. After a while, the numerous bubbles convert it completely into froth, or a substance resembling saliva.

EDITORIAL.

DON'T HURRY.

Haste is an evil genius accountable in a great measure for many of our failures. What workman has not at times heard the whisperings of this baneful spirit; almost every tedious operation brings with it the obliging visitor, and as the muscles grow more and more weary, we become conscious of this inward whispering, which so often tells us to leave matters as they are, for, what is left undone to-day may be finished to-morrow. Would that fatigue was the only cause for this invasion, but the circumstances which lead astray are so numerous that even the honest worker evades them with difficulty. Hurry in work soon begets negligence, and each case imperfectly finished breeds indifference, and promotes the downfall of an artistic standard.

Vice is a monster of so frightful mien;
As to be hated needs but to be seen;
But seen too oft, familiar with her face,
We first endure, then pity, then embrace.

The man who understands how to perform a duty, and possesses the ability to perform it, but through the influence of either haste, negligence or indifference, fails in the endeavor, is guilty of a misdemeanor against himself, which time is sure to reveal, and prove the reaping only in proportion to the sowing.

While it is impossible for any one to escape the humiliation of occasional failures, yet we may class them under two heads; first, those already considered as the result of some outside influence which, bearing upon the operator, prevents the use of his concentrated endeavors; second, those unavoidable failures

which not even skill and excellence are able to combat. Such must come to every one, and where we have done our best we have done our all; and now to weave a short moral, would it not be best for each and every one to quit the daily task with that consoling thought uppermost in the mind, entering upon recreation with a light conscience and keen pleasure.

XXX

EXPLANATION.

The *Dental Review* for July, 1887, page 473, publishes an article by Louis Ottofy, D.D.S., entitled "Implantation," in which the writer call attention to a *slight error* which his keen observation has led him to detect in an article by A. H. Fuller, D.D.S., entitled "A Case of Replantation," and the accompanying editorial comment published in the ARCHIVES OF DENTISTRY, January, 1887. He says: "A slight error as to the method of retaining implanted teeth, came to my notice recently. On page 23, ARCHIVES OF DENTISTRY for January appears an article by Dr. Fuller, of St. Louis, the report of a case of replantation, the rubber dam is *recommended*¹ for the purpose of retaining the tooth in position. The editor in commenting on the subject joyfully concludes by saying that 'this is a new feature, and we think superior to any means heretofore used for the retention of the teeth in similar cases.' With all due respect for these gentlemen it may, nevertheless, be stated that the same appliance for the same purpose was used and recommended by our ingenious confrère, Dr. Wilhelm Herbst, of Bremen, as long ago as 1881 (*Deutsche Vierteljahrschrift f. Zahnheilkunde*, No. II, Vol. xxi, April, 1881, page 172). A simple bandage for replanted teeth." Thank you, doctor, for placing the credit of this appliance where it is manifestly due.

We had not seen, or heard, of the article referred to when Dr. Fuller's article was published consequently was not aware

¹The Italics ours.

that the appliance in question had been used by any one prior to Dr. Fuller's use of it. Practically it was therefore new to us and perhaps to some of our readers not familiar with the German language. In regard to the doctor's criticism of Dr. Fuller's article when he says, "this suggestion is questioned by authentic priority," we think we can detect a slight error on the part of friend Ottofy.

Dr. Fuller, in his article, makes no suggestions, recommendations or claims to priority in any of the details of the case which he gives in a plain, brief manner, characteristic of his modesty. The suggestions, recommendations and priority claims, if any, were made by ourself in our comments on the article, and we stand corrected. We are led to make the above explanation in justice to Dr. Fuller and to correct any impression that Dr. Ottofy's criticism might give, that Dr. Fuller would lay claim to that which of right belonged to another.

THE MANAGEMENT OF PULPLESS TEETH.

We are in receipt of a fresh little monograph entitled, "The Management of Pulpless Teeth," edited, published and gratuitously distributed by the Odontological Society of Chicago—a society which is imbued with the true spirit of modern advancement, neither lacking in ability nor generous motives, composed of members who have individually and collectively won eminence by an unselfish devotion to the general good of all, and whose far-reaching, elevating influences are being strongly felt throughout the entire "Dental Profession of the West" to whom this little work is kindly dedicated.

It contains much information and many useful hints. It describes in simple English the most approved and modern methods of treatment in a department of dentistry which has been fraught with more downright mismanagement and failures than any other.

If it could be put into the hands of *every dentist* an incalcu-

lable amount of good would certainly come of it. Nor should the financial burden of such an enterprise be allowed to fall entirely upon our Chicago friends.

We hope to see at least every Western State Society take some action in this matter. C. S. C.

A NEW LOCAL ANÆSTHETIC.

The *Medical Record* for July 30, page 127, contains an article by J. Herbert Claiborne, Jr., M. D., descriptive of a new local anæsthetic which promises to equal, if not rival, cocaine. It is an alkaloid obtained from the leaves of a tree known as the Tear Blanket Tree, in the locality where it is found (West Feliciana Parish, La.).

Dr. Allen M. Seward, of Bergen Point, N. J., discovered the alkaloid and from the likeness of the tree to the *Acacia Stenocarpus*, dubbed the new alkaloid *Stenocarpin*. From personal observations and the results obtained from numerous experiments, Dr. Claiborne predicts for "*Stenocarpin*" a wide field of usefulness in all departments of surgery when local anæsthesia is desired, and it only remains to further experiment to develop all its possibilities.

ETHER FOR SENSITIVE DENTINE.

As a remedy for sensitive dentine, I am quite certain that ether has not been appreciated by the profession generally.

Given by inhalation from a napkin held by the patient, one or two minutes suffice to produce the desired result. It is the first effect of the ether that we want. This is not often a state of unconsciousness, but one in which sensitive dentine may be cut with impunity and without pain.

When the pain begins to return a little more ether is given, but during the whole sitting enough has not been given to seriously interfere with the well-being of the patient. Indeed,

the after-effects are often less disagreeable when ether is taken, than when there has been suffering for an hour or more from the operation.

This remedy is *old, effective, expeditious*.

The objectionable odor is a disadvantage. I have used bromide of ether and chloroform, but after five years use of the ether I do not hesitate to give it the preference all things considered.

I am feeling that I ought to use it more frequently than I have.

G. F. E.

DR. L. P. HASKELL, of Chicago, as we learn from "*Items of Interest*," met with a serious accident recently which destroyed the sight of one of his eyes. The loss of an eye, to a dentist especially, is a serious matter. We sympathize with the doctor in his sad affliction. We understand that the doctor has now in press a work on "Prosthetic Dentistry" which will be issued soon. We know of no one better qualified to prepare a work on this subject, and shall look with interest for this new volume.—*E*.

NATURE OF PAIN.—Dr. Dean drew attention to the Mortimer Granville theory of the explanation of pain, that it consisted in an abnormal vibration of molecules in the nerves. He had thereupon invented an instrument which, being brought in contact with the painful nerve, produced vibratory equilibrium. Dr. Granville claims to have been thus quite successful in the treatment of neuralgias. He assumes that acute pains represent very rapid vibrations, and he produces slow vibrations in the nerves to equalize and thus produce normal vibrations. Deep seated and dull pains represent slow vibrations and are healed by rapid vibrations.

Dr. Dean thought that perhaps the anodyne effect of electricity could be thus explained.—*Courier of Medicine*.

BRIEF MENTION.

QUERY—What is the meaning of the Chicago Dental Review Company giving wide circulation to a neatly bound pamphlet containing those famous speeches by Drs. Kingsley and Flagg delivered at the Northern New Jersey Dental Society, long after the meeting of the American Medical Association with its concessionary resolutions calculated to put this question in its grave? It would seem as if there was a hankering tendency in some quarters to continue the agitation of that very slippery umbilical cord, almost before we have had an opportunity to get fairly astride of it and enjoy the fruition of our fond and long sought hopes. If the great medical profession stoops to honor us by making us an appendix vermicularis, why should we carry *retroussé* noses before we have hardly commenced to breathe this truly constituted professional air of our new position. C.

DON'T ALL speak at once, but let us hear from a limited number of dentists as to *how* they cleanse their instruments after they have been used. Obviously it would not be healthful to the interests of the profession to have *all* dentists give an honest report on this subject. If the reports that we hear now and then from patients are worth anything there is need of ventilation on this subject.—GEO. F. EAMES, M. D., BOSTON.

Immediately after each operation our assistant removes *all* soiled instruments from the table, and after cleansing them with water plunges them into a disinfecting bath of hydro-naphthol (1 to 1,100 water) which is kept convenient for this purpose. They are then removed, thoroughly wiped and returned to their proper places in the operating case. ED.

ANTISEPTIC MOUTH WASH.—One of the greatest living authorities upon buccal bacteriology, Dr. Miller, finds that, by using the following mixture, he could completely sterilise the mouth, cavities in carious teeth, etc. Thymol, 4 grains; benzoic acid, 45 grains; tincture of eucalyptus, $3\frac{1}{2}$ fluid drachms; water, 25 fluid ounces. The mouth is to be well rinsed with this mixture, especially just before going to bed, since most of the damage by fermentative and putrefactive processes in the mouth is done at night, during sleep, unless the exciting cause be previously removed or rendered inert.—*British Jour. Dent. Science.*

TOUGH ON JERSEY BRETHREN.—It is stated that one of those parasites of a fungus growth (in this case a Jersey man) which attach themselves to respectable professions, has caught on to dentistry and Barnum's circus, having made a contract with the "great showman" to look after and preserve the teeth of the herd of elephants, ostriches, orangoutangs and mummies. Traveling around on the tail end of the "show" his ambulance placarded with bills and posters, he draws attention to, and solicits trade for his city offices, firm of "We, Us & Co.

OFFICIAL REPRESENTATIVES TO THE NINTH INTERNATIONAL MEDICAL CONGRESS.—It was announced several weeks since that Dr. Leopold Servais, of Antwerp, had been appointed by the Belgian Government as representative to the Congress in Washington. More recently we learn that Deputy Surgeon-General Jeffrey A. Marsten, M.D., of the British Army, has been designated as representative by his Government; and the Government of France, through the Academy of Medicine, has designated as representatives Drs. Charpentier, Dujardin Beaumetz, Léon Le Fort, Trélat and Vallin. From all directions, at home and abroad, the indications of a very large and, interesting Congress are of the most gratifying character.—*Ex.*

AT THE twenty-first annual commencement of the New York College of Dentistry fifty-one students graduated. Number of matriculates, 193.

MONTHLY LIST OF PATENTS.—For inventions relating to dentistry, bearing date April 25, 1887. Reported expressly for this journal by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C. Advice free.

360,206. Artificial tooth-crown—G. A. Colcomb, Convent, La.; 360,695. Dental regulating device—T. S. Holmes, Brooklyn, N. Y. 360,429. Electro-cautery instrument for use in surgery—D. H. Goodwillie, New York, N. Y. 360,864. Dental plugger—J. H. Edmonds, Valparaiso, Ind.

For May 25—361,906. Dental chair—E. P. Stilles, Austin, Texas. 361,806. Dental engine brush—L. W. Ballard, Alliance, Ohio. 361,768. Dental plugger—W. Loewenthal, Hoboken, N. J. 362,310. Dental apparatus. H. W. Parsons, Wamego, Kans. 362,783. Dental disc carrier—H. C. Register, Philadelphia, Pa. 362,808. Dental polisher—J. B. Wood, Camden, N. J. 362,678. Valve for syringes—B. F. Sutton, Brooklyn, N. Y. 362,803. Artificial tooth holder. J. W. White, Philadelphia, Pa. 363,291. Dental engine—W. W. Grant, Athens, Tenn. 363,152. Press for dental flasks, etc.—M. M. Maine, South Manchester, Conn.

For June 25—363,911. Dental mallet—H. C. Register, Philadelphia, Pa. 363,904. Dentistry—Charles McLean, Boston, Mass. 364,070. Artificial tooth—David D. Weisell, Ft. Wayne, Ind. 364,531. Suspension dental bracket—L. M. Mathews, Lawrence, Kas. 364,505. Combined dental speculum, reflector, and Cheek-Compressor—David Genese, Baltimore, Md. 364,832. Machine for cutting dental burrs—Louis Maillard, Galt, Ontario, Canada. 365,322. Lowering mechanism for dental chairs—Levi Stuck, Hart, Mich. 365,098. Dental engine—H. C. Register, Philadelphia, Pa.

IMPLANTATION AND CHICAGO ENTERPRISE.—The enterprising dentists of Chicago regard the Egyptian mummies as veritable bonanzas. The old teeth are extracted in Egypt and sent to Chicago where they are implanted in my lady's lovely mouth, to prosper and to take root. Look out for the antiquated odor of the modern kiss of the Chicago lass.—*Ex.*

SILK LIGATURES.—I desire to endorse the remarks of "G. F. E." in July ARCHIVES in regard to the utility of silk ligatures in regulating. I completed an ordinarily difficult case nearly a year ago in which I used the above exclusively, making a most successful and satisfactory operation.—H. B. VAN DORN.

CORRECTED.—In my report, in the June ARCHIVES, of a case of implantation the date of the operation should read March 24, 1886, instead of 1887. A year in such a case makes a difference.—D. W. FELLOWS.

CAN DOCTORS PRACTICE DENTISTRY?—A case involving this point recently came up in this city, and was decided in the affirmative. A Dr. Bradford was charged with illegally practicing dentistry. He showed that he was a legal physician, and the case was dismissed.—*Medical Record*.

TREATMENT OF CATARRH OF THE ANTRUM.—M. Combe recommends trephining in the treatment of chronic catarrhal inflammation of the antrum of Highmore, and subsequent disinfection by iodol, which, on account of the absence of odor, is preferable to iodoform in such cases.—*Medical Record*.

TO SEPARATE the plaster in flasks, I use tissue paper, wetting it down with brush and water; it is effectual and is done quickly. I often turn both parts with one patch of plaster, You can put on two coats when needed.—DR. W. D. BAUGAN.
Items of Interest.

THE *American Lancet* says the dentists have buried the hatchet and unite in making their section of the International Congress a success. Would that all the members of this profession could be likewise generous.—*Weekly Review*.

A CURIOUS anthropological discovery is announced from Spain by Prof. Miguel Marazta. In the valley of Rebas, at the end of the Eastern Pyrenees, there exists a somewhat nu-

merous group of people, called Nanos, or dwarfs, by the other inhabitants. They are less than four feet tall, are quite well built, with small hands and feet, and are given an exaggerated appearance of robustness by broad hips and shoulders. All have red hair. The face is as broad as long, with high cheek bones, strongly developed jaws, and flat nose. The eyes are somewhat oblique, like those of Tartars and Chinese. A few straggling hairs take the place of a beard. The skin is pale and flabby.

MIXING CEMENTS.—It is a difficult matter to thoroughly incorporate the powder and liquid of zinc phosphate fillings on a plain glass or porcelain slab, if the proportions of powder to the liquid are to be the greatest, so as make a putty-like mass, because the first crystalization begins before the mixture is complete, but, if a piece of heavy French-plate glass be carefully and finely ground on both sides, either side is ready and the other surface will be less likely to slip on the table while mixing, a very annoying occurrence if the left hand is occupied at the patient's mouth. The ground surface prevents a slipping and dodging about of the materials; so that with the quickest setting cements, a stiff mass is rapidly mixed with a broad flexible spatula—don't use any other form of spatula. To clean the slab, put it in water for fifteen or twenty minutes and it will wash up as nicely as plain glass.

A. M. Ross.

Springfield, Massachusetts.

“BULLY!—He was a brave man who declined to be vaccinated on the ground that he was not to be cowed by any living man.”

PYEMIA FOLLOWING THE EXTRACTION OF A TOOTH.—Dr. Zaradski, of Warsaw, reports a case of fatal septic pyemia from the extraction of a tooth. One of the lower molars was extracted, in consequence of which the patient's face became greatly swollen, and on the third day rigors with fever came on. After lingering nineteen days, the patient died. At the

autopsy necrosis of the inferior maxillary was found at the point where the tooth had been extracted; the temporal bone was infiltrated with pus, and the dura mater of that side was covered with offensive pus. The soft parts adjacent were infiltrated and the veins were filled with pus.—*Druggists' Circular*.

NATURE in repose is the bosom of God, and on it the weary and heavy laden find their rest.

THE STARS that cheer the night of great suffering with their beams, shine down from no less a dome than the vaulted and measureless thought of man's immortality.—MURRY.

TO MARK STEEL.—Coat the tool, or instrument, with wax warmed so as to run. When cool, mark the names or engrave it, and apply aquafortis (nitric acid). After a few moments, wash off the acid with water and remove the wax. S.

THAT is a good book which is opened with expectation and closed with profit. ALCOTT.

COCAINE IN BURNS.—If a solution of 1 part of cocaine in 40 parts of liquid paraffine be applied to burns, the pain ceases, and the healing process generally progresses favorably.

TO WHITEN THE NAILS mix the following:

Acid sulph. dil.,	-	-	-	2 dr.
Tinct. myrrh,	-	-	-	1 dr.
Aquæ dist. or spring water,			-	4 oz.

First clean the hands with white soap, and then dip the fingers into the mixture.—*American Druggist*.

STRICT attention should be paid to the temperature when mixing cements for filling teeth and other art purposes. Heat hastens and cold retards the process of crystallization. There is more difficulty when the temperature is higher—an even one of about 60° is best for most cases.—*Caulk's Annual*.

A PHARMACEUTICAL SPECIALTY FOR DENTISTS.

LISTERINE.

FORMULA.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

DOSE.—Internally: One teaspoonful three or more times a day (as indicated), either full strength or diluted with water, or in combination with other drugs. As a local application to ulcers, wounds and abscesses, or as a gargle, mouth-wash, inhalant or injection, it can be used ad libitum, diluted as necessary for varied conditions.

Antiseptic, Prophylactic, Deodorant, Non-Toxic, Non-Irritant, Non-Escharotic, Absolutely Safe, Agreeable, Scientific, and Strictly Professional.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of preventive medicine—individual prophylaxis,

AND THE REQUIREMENTS OF GENERAL

DENTAL ✦ PRACTICE

LISTERINE IS A

Perfect Tooth and Mouth Wash,

NON-SECRET AND PROFESSIONAL,

And therefore has received the Highest Recognition as the Best General Antiseptic for a

DENTIST'S PRESCRIPTION.

Dentists interested in LISTERINE will please send us their address, and receive by return mail, post-paid, our new and complete pamphlet of 36 quarto pages, embodying

A TABULATED EXHIBIT of the Action of LISTERINE upon inert Laboratory Compounds;

FULL AND EXHAUSTIVE REPORTS and Clinical Observations from all sources, both Medical and Dental, confirming the utility of LISTERINE as a general Antiseptic for both Internal and External use; and particularly

MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various Antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. Miller, A. B., Ph. D., D. D. S., Prof. of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

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Respectfully yours,

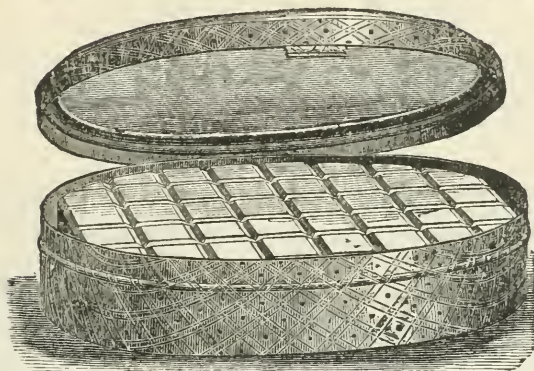
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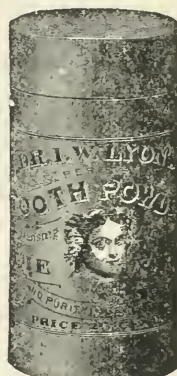
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Announcement for the Course of 1887-88.

On Tuesday, October 4, 1887, the Northwestern College of Dental Surgery commences its Third Annual Session, and, in the interest of advanced education in the Dental Profession, the Directors have decided to extend the school year from the present course of six months to one of nine months, thus giving a longer time for study and practical instruction and avoiding the crowding necessary in a shorter term.

Every candidate for admission must be eighteen years of age, and must present to the Faculty satisfactory evidence of a good moral character. Unless already a matriculate of the college, or of some other recognized college or university, or a graduate of some recognized academy or high school, or holding a teacher's certificate, he must pass an examination in Arithmetic, Geography, English Grammar and Composition, United States History and Natural Philosophy. He shall subscribe to Article II, Section 3, of the Code of Ethics of the American Dental Association.

The candidate for the degree of Doctor of Dental Surgery must have attained the age of twenty-one years. He shall have passed a satisfactory examination, both oral and written—a written examination being substituted in this college for a thesis. He shall have studied dentistry for three years, including two courses of lectures, one of which shall be at this institution. Graduates in medicine may apply for the degree of D.D.S., after having had two full years of practical instruction or experience in dentistry, one year of which, including one course of lectures, must be spent in the college. After these requirements have been complied with, upon recommendation of the Faculty and approval by the Board of Directors, the candidate will receive the degree of Doctor of Dental Surgery.

FEES—For the first and second years a student is a member of the college the fee is \$100 per year for any subsequent year, \$50. There are no other fees, either for matriculation, demonstration or diploma, the above covering all the tuition and graduation fees of the course. For annual catalogue and any other information, address

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THE FALL SESSION will begin on the First Monday in September, and continue until the 3d of October. One lecture will be delivered each day. The balance of the students' time is fully occupied in the Infirmary, Laboratory and Dissecting room.

The Faculty would especially recommend that all first-course students attend this and the spring course.

THE REGULAR WINTER OR SESSION will begin Monday, October 3, 1887, and continue until the fourth Wednesday in February, 1888, with a short recess at Christmas.

THE SPRING SESSION begins the first Monday after the close of the Winter Session, and ends the 25th of April. The work of this session is entirely practical; no lectures are delivered.

The lectures and clinical instruction in the Infirmary and Laboratory will fully occupy the students' time, to which they should be prepared to devote their undivided attention from the beginning of the session.

THE WINTER COURSE is so arranged as to cover the entire five months, and it is of the first importance that students should be in attendance on the first day. The loss of a few lectures at the beginning will retard progress throughout the course.

For further information address,

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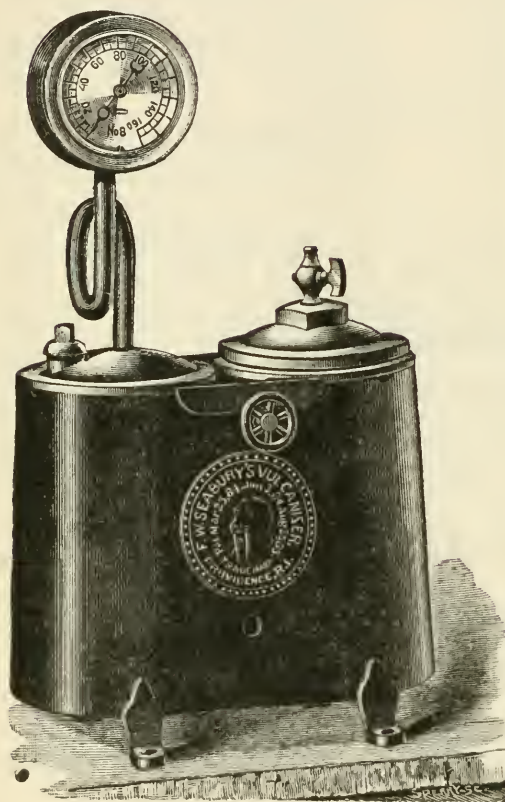
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1887-8.

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MERIT WELLS, D.D.S., Indianapolis,
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TO THE PROFESSION.

DEAR DOCTOR:

As already intimated editorially we are arranging a new and somewhat novel method in the dental journalism (which has been successfully adopted in other professions) which we will explain fully in our March issue. Suffice to say that the literary work, in connection with the make-up, will be unlike any other dental journal now published. Brevity and saving time of the busy practitioner will be one of the recognized features in the editorial, original articles, cases of practice, home and foreign correspondents, as well as items of interest. No long, prosy papers or society proceedings will have any place in the ARCHIVES, but only such matter condensed as is of practical importance to the profession, and made so interesting that the busiest or the laziest dentist will read. The ARCHIVES will not be local in the literary work, but will take in every country where ancient or modern dentistry is practiced. We, as publishers of medical journals for many years, can without hesitation say that our proposed method will meet with the approval of every member of the medical profession. As already intimated it takes time to complete our organization; however, the present number will indicate to you in part what the ARCHIVES will be, although dimly our March number will be a fair sample.

The ARCHIVES is not in the least degree controlled by any association or dental supply house, but is independent and published in the interest of the entire profession. The price is reduced from \$3.00 to \$2.00 per year. Those of our present subscribers who have already remitted \$3.00 for this year will have \$1.00 credited on next year's subscription without they otherwise direct. To those that have discontinued or are not now subscribers, we solicit them to sign blank below and mail to us early.

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To those dentists who are using our make of teeth, we say nothing, as they are as well aware of the qualities of our goods, as we are; but to those *not* using them, and *who are annoyed by the teeth they do use cracking in vulcanizing*, or breaking in wear to an unusual degree, we say, give JOHNSON & LUND'S IMPROVED ARTIFICIAL TEETH a trial.—*Demand* them of the depot you are patronizing, and if they are not forthcoming, *write directly to us*, and *we* will either supply you or direct you where you can obtain them nearer home.

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A Condensed Monthly Record of Dental News.

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THE Archives of Dentistry.

A MONTHLY RECORD OF DENTAL SCIENCE AND ART.

VOL. IV., No. 9.] SEPTEMBER, 1887. [NEW SERIES.

ORIGINAL ARTICLES.

CERTAINLY IT IS EXCELLENT DISCIPLINE FOR AN AUTHOR TO FEEL THAT HE MUST SAY ALL HE HAS TO SAY IN THE FEWEST POSSIBLE WORDS, OR HIS READER IS SURE TO SKIP THEM; AND IN THE PLAINEST POSSIBLE WORDS, OR HIS READER WILL CERTAINLY MISUNDERSTAND THEM. GENERALLY, ALSO, A DOWNRIGHT FACT MAY BE TOLD IN A PLAIN WAY; AND WE WANT DOWNRIGHT FACTS AT PRESENT MORE THAN ANYTHING ELSE.—*Ruskin*.

DENTAL EDUCATION FOR THE PEOPLE.

BY C. W. MUNSON, D.D.S., TOLEDO, O.

At present there is no question of more vital importance to the dental profession than the one of how shall the masses be effectively reached, by proper instruction on the subject of "Health from a Dental Standpoint." Much has been done, but there remains a thousand times more to do. There is so much of ignorance or misinformation on dental topics that one hardly knows where to begin, but a radical work on this line should be done and must be done if the profession would have the people keep pace with the progress of the profession.

How are the people to avail themselves of the new and improved methods and operations of modern dentistry if they never hear of them?

Dr. Bethel in the *Ohio Journal* for July advocates introducing the subject of dental instruction into the course of study in our common schools—a very good plan but not feasible, and a long time before it would be effective to remedy evils that now exist as a result of ignorance or misconception.

In England in popular lectures before the schools this subject is presented in a practical way, but little good will come of any agitation or effort on this subject that does not reach and convince parents. Americans are a reading, thinking people; I suggest that every dentist secure, or prepare a series of plain, practical articles on dental topics, and secure their insertion from time to time in his local newspapers. Many people will accept and believe what they read much more readily than what they are told, so that the constant presentation of some phase of the question in the newspapers all over the country, would reach all classes of our people in their homes and result in untold good.

If the dental profession is to occupy the place it is entitled to in the estimation of the people, it must win its way there and it cannot do that until the masses of the people recognize our claim to dental usefulness.

Circulate all the popular dental literature that is sound, wholesome and practical, that you can, but secure the publication of all you can in your home papers. The people will read it and our profession will soon have the same exalted position in the estimation of the people that it now occupies in our own—a position it has honestly won, but the merits of which the general public are almost totally ignorant.

This is a subject that is receiving more attention, and should occupy a place in the papers and discussions of our societies. Let us hear from others.

AN ARTIFICIAL CROWN.

A. W. M'CANDLESS, D.D.S., DAVENPORT, IOWA.

The crown I am about to describe is not altogether original with me, but as I have seen no notice of it in any of the journals, I will try to give an idea of the manner in which it is constructed.

An ordinary plain tooth—the kind used in rubber work is as good as a plate tooth and usually much more easily obtained—suitable for the case in hand is selected and fitted as accurately as may be to the root which has been previously prepared, care having been taken that the root is cut quite a little above the margin of the gum.

The tooth is then backed with platina which should be allowed to extend down below the incising edge of the tooth.

A copper wire 18 guage—platina is preferred—and about $1\frac{1}{2}$ inches in length is laid with the centre over the pins of the tooth, bent down around the outside of the pins and up between them, thus forming a loop securely holding the pins. The ends of the wire are now twisted together forming a pivot of the very best shape for secure fastening in the root. Enough cement is used to simply catch the end of the pivot when the artificial crown is in place.

When the cement is sufficiently hard to hold the pivot firmly, fill the remainder of the root with amalgam which must also extend over the entire surface of the backing. Thus the metals all become thoroughly amalgamated into one solid mass, making a secure permanent operation leaving no cement exposed to the fluids of the mouth, to become disintegrated.

I have put on many of these crowns where any other crown seemed impracticable and impossible on account of the poor condition of the roots.

I recently attached a cuspid crown of this kind to a bicuspid root that seemed almost worthless, as there was little left of it and the crown having been absent for so long that the lower bicuspid came almost to the gum surrounding the upper root.

The shape of the root can well be imagined being quite depressed in the centre so that it would be impossible to perfectly ferrule it, whereas the amalgam could be thoroughly adapted to it.

This being a first bicuspid and my patient a young lady with otherwise pretty teeth, of course the adaptation of a perfectly natural looking crown in such a position was a gratification to both my patient and myself.

As I said before, I have placed many of these crowns on roots that seemed too far gone for any other good crown with which I am familiar and I have the first failure to hear from.

A CASE OF FRACTURE OF THE LOWER JAW WITH REMARKS ON THE TREATMENT.

BY THOS. L. GILMER, M.D., D.D.S., QUINCY, ILL.

On June 1, 1887, Joseph H. aged 58 years, of Durham, Mo., while leading a horse through a gate received a kick from the animal on the right side of the inferior maxilla, which drove him with great force against the open gate, causing a compound fracture of the right side of the jaw on a line with the first molar tooth, and a comminuted fracture of the angle and a part of the lower half of the ramus of the left side.

All the teeth on the right side posterior to the fractures were missing. The posterior fragment of the compound fracture was elevated by the action of the muscles. The anterior fragment, containing all the teeth of this jaw, was drawn toward the left side, and greatly depressed, giving the patient an aspect anything but agreeable.

The posterior fragment of the left side, which included the greater portion of the ramus and a part of the angle, was but slightly displaced. The treatment was as follows :

On the right side the gum was dissected up from the bone on both buccal and lingual surface for about half an inch anteriorly and posteriorly to the fracture. In each fragment a hole was

drilled of suitable size to just admit a No. 16 (standard gauge) platinum wire, which was bent in the shape of a staple; the fragments having been put in place the two arms of the staple were inserted into the holes from the lingual surface. These arms were brought together on the buccal side and tightly twisted, drawing the parts into close apposition. Next a short steel wire, No. 27, was placed around the neck of each individual tooth of the lower jaw between the second bicuspid on the right and the second molar on the left and the corresponding teeth of the upper jaw. The ends of each wire were brought together and twisted, fastening it securely to the teeth. This being done the teeth of the lower jaw were exactly articulated with those of the upper and the wires of the lower teeth secured to those of the upper by bringing them together and twisting, thus firmly lashing the lower to the upper jaw. To prevent lateral motion the wire of the upper left lateral was secured to the lower right lateral, this crossing being continued throughout, held the jaw immovable. The smaller fragments of the comminuted fracture were pressed in place as nearly as possible. The compress and bandage were omitted in order that the nutrition of the parts might continue uninterrupted, the before described method of treatment having enabled me safely to dispense with these otherwise necessary appliances.

The patient was advised to cleanse the teeth thoroughly each day, so far as they could be reached by a stiff tooth brush. An antiseptic wash was ordered for frequent use. The patient was fed on liquid food by means of a long-nozzled bulb syringe known to the physician as a powder blower. The bulb of this syringe was filled and its contents discharged into the mouth through the aperture made by the loss of the teeth near the compound fracture. All seemed to go well until about the third week when an abscess, probably caused by a spicula of bone unobserved when the fracture was reduced, formed just below the compound break. A free opening was made into the abscess in such a way as to establish thorough drainage. The pus cavity was syringed with peroxide of hy-

drogen and a drainage tube sufficiently long to reach the bone was inserted. Every day as long as the formation pus of continued per oxide followed by a strong solution of carbolic acid was forced through this tube. The drainage tube was held in place by three silk ligatures stitched in its lower end, the ligatures being secured to the face by adhesive strips

The comminuted fracture being simple, united in about four weeks, without complications, while the compound fracture required two weeks longer. At this time the sixth week, the wires were removed, the patient being advised not to use the jaw for mastication for some time longer. The contour of the face is entirely restored, the articulation is good, and there is but little left to indicate the miserable condition the patient presented when he first came under my care.

HOW TO REGULATE THE PRACTICE OF DENTISTRY.

BY E. COLLINS, D.D.S., LITTLE ROCK, ARK.

That the practice of dentistry, like every other profession of to-day, needs to be regulated does not admit of a doubt, but just where and how is the question that seems in certain localities to be stirring massive intelligences.

Having myself for many years past felt the same moving or the spirit, I hope that a few suggestions relative to this matter may not be deemed inappropriate or unworthy to receive the earnest consideration of minds alive to the highest interests of the profession and everything it proffers to the public weal.

To regulate substantially the practice of dentistry, and thus preserve and enhance the dignity of our profession and protect the afflicted public from a more formidable evil, namely, dental charlatanism, I would suggest that the most appropriate place to begin is at our dental colleges, by demanding that those who are chosen to fill the several chairs in the same shall be men endowed with unimpeachable professional ability

and noted for that high sense of honor that would shrink from prostituting the same, to abuse the trust conferred upon them by using their position to feather themselves with the plumage of unmerited honor, regardless of the benefits they are expected and are in duty bound to confer upon others. Having placed over our colleges men of professional ability, let the same see to it that the threshold thereof be securely closed against those who may come knocking for admission who have not on the wedding garments of fitness.

Having accepted such and received the accustomed fees, then let each chair discharge its whole duty and thus render an equivalent for the money received from matriculants. When the course shall have concluded they will then have learned who are worthy to receive the degree of D.D.S., and none should be thus honored who are found unworthy. Let this course be adopted and persevered in, and it would not be long before the hundreds of titled quacks who are annually being spewed from our colleges and go forth flourishing their diplomas before the eyes of an ignorant and non-discriminating people, detracting more from the honor of the profession than is possible for the untitled or non-pretentious charlatan, would find their ranks diminishing.

In conclusion I would add that public intelligence together with thorough qualification on the part of the dentist, is our only security against professional frauds. To have the first the highest practical skill must be brought into requisition in serving them. To have the last, our colleges must do their duty, but in no case need we look to civil law for deliverance from said evils, for a law that discriminates between titled and untitled charlatanism is not just, and hence cannot be constitutional.

In a little time I shall have closed my fourth decade in serving the public in the capacity of a dentist, and my experience in all these years has been that if we train well the boy the man will take care of himself; so likewise, if we train well the dental student the profession will take care of itself.

A GOOD AMALGAM FILLING.

BY J. R. CALLAHAN, D.D.S., HILLSBORO, OHIO.

We do not propose to discuss the properties of amalgam as a filling material, but to give a method whereby better results may be obtained than by methods in general use. It is well known to all dentists that an immense quantity of amalgam is used every day in the filling of teeth. This being the case it behooves us as a profession to endeavor to study and adopt the best methods of inserting the filling material. The following, of all other methods, has proved the most satisfactory to the writer. We will suppose a proximal cavity between any of the molar teeth, to be properly prepared, rubber dam adjusted, matrix in position, tooth dry and in good shape. Now mix a proper quantity of almost any of the leading brands of alloy. Mix moderately stiff, insert enough amalgam to fill the cavity about one-third full, tap this to its place, then put in the cavity a strip of Robinson's fibrous and textile filling material, from one-half to one inch in length by one-eighth to one-fourth inch in width, depending on the size of the cavity, tap this down on the amalgam. Most likely the mercury from the alloy will take this all up, if so, add another piece of fibrous material, this time using a steel Herbst rotary burnisher in the engine, using speed and pressure. Use fibrous material in this manner till within about $\frac{1}{16}$ or $\frac{1}{32}$ of an inch of the grinding surface, when it will be best to fill flush to the surface with amalgam. Do this for the purpose of getting a hard grinding surface. After filling flush to the surface with alloy, lay on strips of fibrous material and rub with burnisher; keep adding material and burnishing until you have taken all the mercury from the filling that it is possible to get. Then finish carefully. In removing the matrix you will find the filling adhering to it, unless you have the precaution to put a thin coat of oil on the side of the matrix next to the cavity. If the above method is carried out, you will have an amalgam filling that under ordinary circumstances will not tarnish, and will be the minimum amount of shrinkage.

A SIMPLE MATRIX.

BY DR. J. S. ROUNCE, ELLSWORTH, WIS.

I have some of the patented matrices but seldom use any of them, preferring a matrix made as follows: Take a very thin piece of sheet brass, steel or iron; the thin sheet iron that is used in the mailing cases that instruments come to us in answers very well. Cut out a piece of suitable width and length shaped thus bend back upper corners on dotted line and curve to fit the tooth thus place between the teeth, make a feathered wedge of orange wood and push behind the matrix at cervical margin; then take a pellet of base plate gutta-percha of suitable size, warm and pack into the spaces between the teeth so as to be securely held behind the reflexed corners; as soon as cold proceed with filling; when done remove with warm instrument. I find it simple, easily applied and quite efficient.

THE FOLLOWING are formulas for some of the best known amalgams:

Lawrence's:

Silver,	-	-	-	-	-	-	47
Tin,	-	-	-	-	-	-	47
Copper,	-	-	-	-	-	-	5
Gold,	-	-	-	-	-	-	1

Flagg's Submarine:

Silver,	-	-	-	-	-	50
Tin,	-	-	-	-	-	10
Gold,	-	-	-	-	-	1
Zinc,	-	-	-	-	-	1

Flagg's "Facing":

Silver,	-	-	-	-	-	50
Tin,	-	-	-	-	-	42
Gold,	-	-	-	-	-	5
Zinc,	-	-	-	-	-	3

Fletcher's Alloy:

Tin,	-	-	-	-	-	56
Silver,	-	-	-	-	-	40
Gold,	-	-	-	-	-	4

—*Am. System of Dentistry.*

SOCIETIES.

REFLEX ACTION OF THE FIFTH, OR TRIFACIAL NERVE.¹

BY DR. J. S. REYNOLDS.

This, gentleman, is a subject that has received but little consideration from the dental profession at large, and in our dental text books we find there has been nothing written on this subject, so to speak. The spinal cord offers the best and most numerous examples of reflex action; the essence of a reflex action consists in the transmutation, by means of the irritable protoplasm of a nerve cell, of afferent into efferent impulses.

As an approach to a knowledge of the nature of that transmutation we may lay down the following proposition; the number, intensity, character and distribution of the efferent impulses is determined chiefly by the events which take place in the protoplasm of the reflex centre; it is not that the afferent impulses is simply reflected in the nerve cell, and so becomes with but little change an efferent impulse; on the contrary an afferent impulse passing along a single sensory fibre may give rise to efferent impulses passing along many motor nerves, and call forth the most complex movements. An instance of this disproportion of the afferent and efferent impulses is seen in the case where the contact with the glottis of a foreign body so insignificant as a hair causes a violent fit of coughing. Under such circumstances, a slight contact with the mucous membrane such as could not possibly give rise to anything more than a few feeble impulses, may cause the discharge of so

¹Paper read before the Wisconsin State Dental Society at its annual session, July 20, 1887.

many efferent impulses along so many motor nerves, that not only all the respiratory muscles, but almost all the muscles of the body are brought into action. Similar, though less striking instances, of how incommensurate are afferent and efferent impulses may be seen in reflex action.

The cause of reflex action.

The attributes of our climate may be considered relatively dry, with prevailing northwesterly winds, during at least seven months in the year with extreme changes with a variation of the temperature of from 40° to 60° in from six to twelve hours. this climate is extremely trying to the nervous system. It is a matter of observation among the medical practitioners, that this climate is a trying one, particularly to those of the sanguine nervous temperament. A member of our profession must consider himself only partially educated, if he limits himself to the simple duties of the dentist and goes no further than the restoration of the teeth by filling, and the replacement of the lost ones, and ignores the many cases of neurotic affections that are daily met with in this climate, where they assume a complex character, challenging greatly the judgment of the dentist, until he is compelled to recognize their existence among other disturbing elements. I am well aware that some may think we are encroaching upon the duties of the general practitioner, but a little reflection will convince any of us that we may add something to the sum of investigation in the treatment, curation and prevention of neurotic cases and in throwing out these queries, I do it with the hope of awakening among you, gentlemen, a train of thought that may be a benefit to us all.

In treating this subject, I may better illustrate it by examples, and design by an inquiry into the reflex action of the fifth pair of nerves. Bear you in mind, "brother practitioners," that I am with you in seeking after truth, that we must first find out a full array of facts, and from thence educe our theories, and that the truth can in no way be found, except we throw selfish motives out of sight, and if we find that large contour fillings are really reservoirs of thermal influences, to send their thrills

to the co-ordinate terminal nerves, if we find capping of exposed pulps, or the filling of root canals, heavy malleting, by injuring the periosteum, or if the rapid revolutions of drills or disks and corundum wheels, and if in our minds this modern method of rapid operating is injurious to dentine and peridental membrane, then it is our duty to investigate and adopt such methods as we may in time find to be less injurious. It seems to me that the older practitioner who practiced twenty and twenty-five years ago did not have the amount of trouble in this direction that we have at the present day. Anæmia, malaria and syphilis are some of the causes that produce reflex action. I might mention a few of the remedies used in the treatment of reflex action of the fifth pair of nerves. Constitutional measures must be adopted in cases of anæmia malaria and syphilitic origin; such you will find in the medical text books on therapeutics and general practice. I would refer you to Hammond, Ranney, Brown-Sequard, Seguin and Flint; also many others. They suggest the use of tonics, iron, quinia, strychnia, Fowler's sol. of arsenic, iodide of potassium, etc.; also electro therapeutics. Electricity is taking high rank as one of modern treatment in all neurotic diseases, likewise local or palliative treatment.

WISCONSIN STATE DENTAL SOCIETY.

The seventeenth annual meeting of this society was held at Milwaukee, July 19 to 21. The executive committee had prepared a very good programme which, to quote them, was "in point of excellence not excelled in the history of the society." But the history of the society presents other meetings more enthusiastic and profitable, although this was perhaps up to an average of interest. With an addition of some new members and the dropping from the roll a few drones and discord makers the society strengthened herself for future work. All in all it will be considered a very pleasant if not the most successful meeting held.

Among the first resolutions to be adopted was one in token of respect for the late Dr. James S. Perkins, who died since the last meeting and who was for many years one of the most active and honored members of the society.

President Chilson read his address. He described the condition of dental practice in this state twenty-five years ago, and compared it with the present as proof of the great progress made and an evidence of the skill, culture and enterprise of those in practice to-day. His paper was full of good suggestions and well received.

Next came the excellent paper of Dr. Junkerman, of Milwaukee, on "*Pyorrhœa Alveolaris*," which he has kindly furnished for publication in the ARCHIVES.¹

This paper called out considerable discussion very interesting by reason of the ground taken by the essayist and very profitable, as it led up to practical suggestions regarding the diagnosis and treatment of this much dreaded disease.

The evening session was devoted to a paper by Dr. George H. McCausey on the "Animal Cell." His paper was fully illustrated by drawings prepared and photographed showing that he had given his subject much time and study. In appreciation of his efforts and to stimulate further labor in this direction the society voted him a handsome present in the shape of a much needed objective for his microscope. He also exhibited a photo-micrograph of a transverse vertical section of the human skin.

Wednesday morning was devoted to clinics, but aside from a tooth filled by Dr. Barry using the pneumatic mallet, and the exhibition of some specialties, the time was poorly spent. Two of the members exhibited inventions of their own worthy of mention.

One was the clamp of Dr. Fletcher, of Portage, and the other a duct compressor and tongue holder, the invention of Dr. J. S. Reynolds, of Monroe.

Wednesday afternoon papers were read as follows: "The Use

¹See August No., page 351.

of Cocaine," by Dr. Barney; "Sensitive Dentine," by Dr. H. L. Benzhof, of Manitowoc; "Diseases of Children During First Dentition," by Dr. C. A. Southwell. Two papers on "Dental Ethics," one by Dr. Chittenden, of Madison, and the other by Dr. Palmer, of LaCrosse.

Wednesday evening Dr. H. M. Brown gave a very instructive lecture on "Syphilis" in its relation to the oral cavity, which, with the discussion, occupied the session.

Thursday morning Dr. J. S. Reynolds, of Monroe, read an interesting paper on "Reflex Action of the Fifth Pair of Nerves," which will appear in the ARCHIVES.

After hearing and acting upon reports of committees and other miscellaneous business Milwaukee was selected as the next place of meeting, and the following officers elected:

President, W. T. Lewis; First Vice-president, C. A. Southwell; Second Vice-president, F. L. Dolbeare; Secretary, W. S. Sullivan; Treasurer, Byron Douglass.

Milwaukee made herself solid with the pleasure-loving members of the society by providing a grand excursion and fish dinner at which "after dinner" toasts were happily responded to, and songs and merry-making indulged in.

Hotel Windsor was the headquarters for the society and the successful efforts of proprietor and clerks to make our stay enjoyable is worthy of mention. Success to the Hotel Windsor.

CONNECTICUT VALLEY DENTAL SOCIETY.

The semi-annual meeting of the Connecticut Valley Dental Society was held at Montreal in July; its excellent programme, together with its social privileges, made it one of the most notable gatherings in the history of the society. The attendance, considering the distance the members had to travel, was remarkably large, and with the addition of the Canadian brethren, constituted it quite a formidable body; while the presence of so many ladies added much to the social enjoyment of the occasion.

At the opening of the meeting, Dr. Trestler of Montreal, the genial president of the Board of Dental Examiners for the province of Quebec, in a short speech welcomed the society to Montreal. This was very happily responded to by President Stebbins, in which he alluded to the fact "that just one hundred and eleven years ago thirteen of England's fair colonial daughters, against the protests of the mother country formed an alliance with the American eagle and set up house-keeping for themselves. We are descendants of those daughters and have come to visit the parental domain and enjoy the rich things prepared for us. We also consider it appropriate to bring our Queens with us to visit the land which has been ruled over for fifty years, so gracious and beneficently by that christian Queen of queens—Queen Victoria."

These addresses over, the usual routine of business followed, after which the ball was set in motion by Dr. W. Geo. Beers, of Montreal, reading a paper on "Alveolar Abscess," and as usual Dr. Atkinson came to the front and lead off the discussion in his peculiar style. This discussion was interesting and profitable, though nothing new was brought out on the subject. This closed the proceedings for the first day.

In the afternoon, through the courtesy of the dentists of Montreal and vicinity, an extensive carriage drive was taken through and around the city. Promptly at 2 o'clock the whole party was under way, and McGill College was the first stop made and one of the faculty, Prof. Mills, conducted the party through the buildings and then through the Redpath Museum. From there a drive through the principal streets passing various points of interest, then through the French quarter, and around to the Hunt Club Kennels. Here the party inspected the finely appointed club house, and after a look at the 200 hounds kept there, they again started and were driven to Mount Royal Park where they took the car for the top of the mountain. After enjoying the beautiful panorama here spread out to view, the party found a photographer patiently waiting with his camera for them to group themselves together. This was quickly done and an instantaneous picture was taken,

which many now prize as a souvenir of their Montreal trip. From the mountain a drive was taken through their beautiful cemeteries, then to Athletic Club House. Here light refreshments were served which were greatly appreciated, as the last part of the drive had been very dusty. From here the drive was continued on around the mountain and then back to the hotel which was reached at 7:30. All were somewhat tired, yet there was but one remark on every one's lips, "what an enjoyable time we have had."

Wednesday morning Dr. G. V. Black, of Jacksonville, Ill., read a paper on "Recent Theories on the Formation of Pus, Considered with Reference to Dental Operations." This was a very able paper, reviewing all that science has recently brought to our knowledge of the pus forming microbes; as regards to what is pus he says, "all tissue of a primary character is first developed in a homogeneous matrix. This is true of the development of the tissues of the fœtus, and is equally true of the development of tissues of repair. The plastic exudate thrown out in the process of inflammation forms the matrix in which the ameboid cells develop. These cells are always found imbedded within this exudate, and it is essential to their growth or development into tissue. In the formation of pus this plastic exudate is observed to liquefy. The ameboid cells are found floating in the liquid mass, and are then known as pus corpuscles. Indeed, the cells under these circumstances are no longer capable of development. The matrix in which they were lodged and in which normally their development should proceed, has become liquid, and is so changed in its chemical qualities that it fails to support them, and they die. This plastic exudate is also thrown out among the fixed cells, the older elements of the tissue in which an inflammation occurs. Liquefaction may and does occur in this position also. Here we find that the ameboid cells mingle among the fixed cells of the part and all become imbedded in a matrix of plastic exudate. In the event of suppuration the plastic exudate becomes liquid, and the tissue already divided by its presence dies and is in part rendered fluid and floats away with the

liquid material as shreds and cells together with the ameboid cells. All of these combined form what we know as pus."

This liquefaction of the plastic exudate is caused by the operation of microbes.

The speaker gave many of his personal experiments in the cultivation of these micro-organisms, "having often passed a surgeon's platinum suture wire, after having brought it to a glow to completely disinfect it, into a foul root canal and then into the stiff gelatine cultivating media, four, five and six inches and have seen the development of microbes along the tract of the wire from end to end." Also from simply scraping the tongue he has found these organisms, thus demonstrating that they can and do live and develop in the saliva, and will often be found present in the mouth.

In the discussion that followed the practical applications of the facts presented in the paper were to a great extent lost sight of, as most of the discussion was taken up with the technicalities of the question and in attacks on the writer for his nomenclature. While this side of the question was of interest to some, the practical side would have been more profitable. This ended the second day.

In the afternoon a sail was taken through the Lachine Rapids. The Montreal brethren had chartered the steamer *Filgate* for this occasion, and at 2 o'clock she left the canal basin dock with the whole party on board, passing through the locks and a pleasant sail up the canal some nine miles to the river, then came the exciting sail down through the rapids.

In the evening Dr. R. R. Andrews, of Cambridge, gave a paper on the "Development of the Teeth," illustrating with the stereopticon. His slides are all micro-photographs of fresh specimens prepared from embryo pigs, lambs, calves and cats. Many of his slides he prepared expressly for this meeting. This presentation of the subject was one of the finest ever attempted before a scientific body while to many present it was a wonderful revelation.

Thursday morning Dr. J. McManus, of Hartford, read a very interesting and profitable paper, giving the history and pro-

gress dental science has made during the last twenty-six years.

Following came a practical paper on "Hard Rubber and Corundum Disks and Wheels," by Dr. George A. Maxfield. He has a very simple method of making these disks and wheels which he demonstrated by vulcanizing over eighty disks and wheels, after reading his paper. These disks and wheels for use in the dental engine were of various sizes and thickness, many of the disks being as thin as ordinary paper, the whole batch not taking any more room in the vulcanizer than a common flask. After mixing the corundum and rubber (using four parts of the former to one of the latter by weight) he rolls to the desired thickness, then with a sand-paper disk cutter, punches out the disks or wheels. These are strung on a wire placing pieces of tin plate between each disk, then clamped together and are ready for the vulcanizer. After vulcanizing, to make them run true, they are placed on the mandrel in the engine, and while running, the edge of the disk or wheel is held in the flame till soft, then it is run against a piece of glass till it runs true.

In the discussion that followed much surprise was manifested that these disks and wheels could be made so easily while some practical points were brought out in regard to sand and emery paper disks.

The afternoon was devoted to clinics. Dr. L. D. Shepard, of Boston, demonstrating the kindly use of the rubber dam without ligating the teeth to hold it in place. Dr. E. S. Niles, of Boston, demonstrated the filling of approximal cavities in the bicuspsids with soft and cohesive gold. Dr. E. S. Gaylord, of New Haven, demonstrated his method of filling with Wolrab's gold at the cervical border, using the Miller and Brun matrix. Dr. Wm. Barker, of Providence, demonstrated his method of filling with soft gold in the form of densely rolled cylinders. Dr. C. W. Strong, of Bridgeport, filled with cohesive foil proximal cavities in incisors, using automatic mallet and the Perry separator. Dr. C. Frank Bliven, of Worcester, demonstrated the use of the electric mallet. Dr. J. P. Parker, of

Bellows Falls, demonstrated his manner of setting the Bonwill crown. Dr. S. S. Stowell, of Pittsfield, a new crown made by soldering cap and ring to the Logan crown.

Friday morning Prof. Chas. Mayr, of Springfield, read a very interesting paper on "General Health as Shown by the Work of the Kidneys in Relation to the Teeth." He emphasized the fact that the amount of urea excreted was increased by work, mental as well as physical, while it increases very fast by worry, a high percentage of urea indicates too much waste work in the body. He cited a case that came under his own observation in which a remarkable absorption of the teeth was observed, the urine contained large quantities of lactic acid and lactate of lime. "In these cases there is very little hope from mere local treatment by filling, but a constitutional treatment will rapidly produce a complete new growth of the teeth." The purpose of the paper was to obtain the co-operation of dental practitioners to get specimens of urine to be analyzed, where there are peculiar constitutional disturbances affecting the teeth.

Following this was an excellent paper on "Copper Amalgam" by Dr. Geo. H. Weagant, of Cornwall, Ont. He makes the claim that it is the best filling to use for all the teeth back of the canine as it has an antiseptic action, thus preserving the teeth better than other filling material can. It does not change its shape, ball up or bulge out of the cavity but always retains its edges intact. The only objection to its use is that it turns very black, but if the amalgam is properly made it will not discolor the tooth. His formula for making it is very simple. He fills a tall glass jar with a one to three solution of sulphate of copper, pours in enough mercury to little more than cover the bottom, then puts in a piece of iron, one end in the mercury the other end extending above the liquid. This is allowed to stand until the mercury is all amalgamated, changing and renewing the liquid if necessary, using a syphon. When thoroughly amalgamated it must be thoroughly washed and the excess of mercury pressed out. This is a rather tedious operation, but if thoroughly done will make a clean working amalgam.

The meeting closed Friday noon, many of the members going to Quebec that night, while a large party went through to the Saguenay.

Too much cannot be said in praise of the Windsor Hotel as the place to hold such meetings. Its appointments are complete, its entertainment all that one desires, and its manager, Mr. Geo. Isles, a prince among landlords. A large room just off from the rotunda was furnished the society free of cost.

The resolutions that were passed thanking the dentists of Montreal and vicinity for their hospitable entertainment, but mildly expressed the feeling of the society. The lavish hospitality with which they entertained us will ever be remembered, and the fiat has already gone forth that some time in the near future an endeavor will be made to partly repay the obligation that rests upon us.

G. A. M.

MAINE DENTAL SOCIETY.

The Maine Dental Society held its twenty-second annual meeting at Waterville, July 19 and 20, having a good attendance and an interesting session. All were in excellent cheer, and as Dr. Twitchell suggests, one would not suspect that only the day before all had been looking "down in the mouth."

Dr. D. W. Fellows presided, and Dr. O. B. Braun was secretary.

A prominent feature of the meeting was the presentation and discussion of crown and bridge work by Dr. Meriam, of Salem, Fillebrown and Blaisdell.

Dr. Meriam made a strong and earnest argument against the too prevalent practice among dentists of patenting methods and appliances used in dentistry, urging that such a practice is unworthy of a liberal profession and of liberal men.

Dr. Twitchell set forth the great importance of some "Little Things." Dr. Fales discussed "The Care and Treatment of Children's Teeth," and Dr. McDavid made a striking picture of "The Lights and Shades of Office Practice."

Demonstrations and clinics occupied all the available time during the session.

The need of a law for the regulation of dental practice was fully recognized, and a committee was appointed to secure the passage, if possible, of such a law at the next session of the legislature.

The next session of the society will be held in Portland, the third Tuesday in July, 1888.

Following are the names of the officers chosen :

President, Dr. B. M. Hardy; Vice-President, Dr. O. B. Braun; Secretary, Dr. E. C. Bryant; Treasurer, Dr. E. J. Roberts; Librarian, Dr. J. W. Curtis; Chairman of Executive Committee, Dr. D. W. Fellows. D. W. F.

CASES IN PRACTICE.¹

BY I. P. WILSON, BURLINGTON, IOWA.

CASE I.—Mrs. C., wife of a clergyman, came with her physician to consult me as to the possibility of diseased teeth causing the general debility and nasal catarrh from which she was suffering. The catarrhal symptoms had existed for about twelve years: recently her general health was rapidly being impaired, and the catarrh greatly increased. Her breath was intolerably offensive, appetite gone, felt languid and despondent. I found the second left upper molar slightly discolored, but apparently in good condition. No sensitiveness on percussion, but the color of the tooth denoted a dead pulp. From a sense of heaviness in the left cheek, the catarrhal discharge from the left nostril, especially when lying on the right side. I diagnosed the case as one of disease of the antrum, the primary cause being found in the discolored tooth. I accordingly drilled into the pulp chamber and found it filled with putrescent matter confirming my diagnosis. The lady living at a distance I decided to extract the tooth, and was disappointed

¹Written for Missouri State Dental Association SS7.

in not finding pus follow its removal. A probe was readily passed into the antrum and I found the floor thickly covered with a cheesy looking substance, resembling dried pus. Taking a rubber bulb syringe filled with warm water, I thoroughly washed the cavity, the fluid readily passing out of the nose carrying with it large quantities of the purulent matter. I then used, thoroughly, a wash composed of a 5% solution of carbolic acid, and ordered the treatment continued. After her return home my directions were faithfully carried out by her physician, who reports her rapid return to health. Two months after this operation the husband called to see me, and reported his wife as being in the best of health.

CASE II.—Mrs. R., widow, æt. 30, called to have a tooth filled. Found her suffering from a nasal catarrh of sixteen years standing. Found second bicuspid and third molar on left side above slightly sensitive on percussion, with indications of dead pulps; space between them occupied with artificial teeth on rubber plate. She had been under treatment (medically) in Chicago, New York and elsewhere without benefit. Health of late years gradually failing. Breath exceedingly offensive. It had never been suggested to her that diseased teeth might possibly be the cause of her ill-health, and she was loath to follow my advice. Finally she consented, and extracting the third molar I opened into the antrum. An injection of hot water was followed by a gush of corruption from the nose. The treatment of this case with injections of carbolic acid, sulphate of zinc, sulphate of hydrastis, peroxide of hydrogen, was continued for eight months, being used at various times. The discharge gradually subsided, and her health materially improved, when she left for a distant city. I should also state that the second bicuspid was afterwards extracted and found to be in the same condition as the third molar; root much enlarged from excrementosis, and the pulp dead. The crowns of both teeth were sound. The tediousness of the treatment was doubtless due to necrosis of the spongy bones around the natural opening from the antrum into the middle meatus of the nose. These bones gradually softened and

being disorganized little by little were washed away. The septum of the nose was also perforated, throwing the two passages into one.

It will be remembered that the roots of the superior molars not unfrequently penetrate the maxillary sinus, leaving nothing but the mucous membrane which lines that cavity to protect the apices of the roots. When an abscess forms under such circumstances the discharge will always be into the antrum, and the alveolo-dental membrane will frequently not suffer any serious disturbance, making diagnosis in such cases difficult.

CASE III.—Mrs. B., æt. 23, of robust health, called to have roots of first lower molar extracted. She expressed some doubts about the operation because of a "running sore" on her neck. On examination I found a fistulous opening over the clavicle near the place of origin of the platysma myoides muscle. I had no difficulty in tracing the sinus to the lower border of the jaw directly under the diseased roots. I extracted them and without any further treatment, the discharge soon ceased, and abscess healed. The case was of eight years standing and had been pronounced by a counsel of physicians to be of a strumous character. Upon inquiry I found that this tooth had ached just before the swelling appeared on her neck, at which time it ceased aching, and subsequently the crown had broken off leaving the roots in the condition I found them. The facts in the case must have been simply these: The roots of the tooth were unusually long, and when an outlet was sought for the discharge of pus, the weakest point proved to be at the base, instead of the side of the jaw. When nature had secured an outlet through the bone, the pus gravitated down the fibres of the muscle, until it found an outlet at its origin.

CASE IV.—Mr. H., æt. 25, in good health called at my office with a friend. He informed me that he had given up a contemplated trip to his ranch in Texas on account of a malignant growth upon his face. The trouble had been pronounced cancerous, and he had been advised to submit to a surgical operation, as the only hope for his life. I found an irritable looking

tumor about the size of a hazel-nut immediately below the malar bone. There was no opening in it at the time, but he informed me that slight discharges took place at times. After using the lancet a probe was readily passed through the soft tissues and the alveolar process to the apex of the roots of the first molar. After extracting them and using the carbolic acid wash, I told him he need not hesitate taking his trip, as the cause being removed a rapid cure would result. He has since reported his entire recovery.

The above cases as well as others which have come under my observation, impress me the more that in many forms of obscure trouble about the head and face, the teeth as a probable cause should be carefully inspected.

WHEN SPECTACLES SHOULD BE USED.—When we are compelled to remove small objects a considerable distance from the eye. When we find the light insufficient. When the object appears blurred, cloudy, or has a mist before it. When the letters of a book run together or appear double or treble. When the eyes become fatigued after reading or other exercise. These rules answer in many cases, but not always. Never choose a pair of spectacles when the eye is fatigued. Wait an hour or two after, you can be better suited. The tired eye needs rest, not glasses, and if they are purchased when the eye is excited or tired, errors are certain to occur in selecting the proper glasses. Wait patiently for an hour or two, or better still, three.—*The Medical Summary.*

THE RELATION OF HEIGHT TO WEIGHT.—According to Dr. Broca, the well-known French anthropologist, the human body should weigh as many kilogrammes as it measures in centimetres, after deduction of the first metre. Thus a man measuring one metre eighty centimetres (six feet), should weigh eighty kilos (176 pounds). Should his weight be more or less, he is too stout or too thin.

CORRESPONDENCE.

AMERICAN DENTAL ASSOCIATION.¹

NIAGARA FALLS, Aug. 3, 1887.

EDITOR ARCHIVES.—The American Dental Association convened here yesterday in its twenty-seventh annual session. Dr. W. W. Allport, the president, called the association to order promptly at 11 o'clock, with about seventy-five members in attendance, which was considered a very fair number considering all the circumstances—of change of place and the early convening of the International Medical Congress.

The old "steady goers" have again shown their love, for and interest in the association by their presence; among whom I may mention such names as Drs. Atkinson (always first), Taft, Allport, Cushing, Shepherd, Smith, Crouse, McKellops, Keeley, Darby, Stockton, Palmer and Abbott.

After some routine business the president called Dr. Crouse to the chair (the vice-president being absent) while he read his annual address.

When we consider the somewhat acrimonious fight made last year over the election of president, and the parties engaged in it, the action of the president in calling Dr. Crouse to the chair was considered a very graceful and shrewd act, and was so acknowledged by a very vigorous applause.

The thought also occurred to many that this was Chicago's inning.—At this time, on the platform, were the president, Dr. Allport; the presiding officer, Dr. Crouse, an ex-president; the secretary, Dr. Cushing, an ex-president; Dr. Harlan, cor-

¹The above was designed for the August number but an unfortunate delay in the forwarding of mail prevented.—ED.

responding secretary—a president soon to be—and all from Chicago.

“Briton rules the wave” and Chicago the Americal Dental Association, and does it well; too.

The President's address was a history of the rise and progress of dental societies in this country, and was a very acceptable paper, but necessarily too long. The theme, associated effort for the advancement of sciences.

He said there was a great hue and cry against the association when first founded, on account of its delegated character, and very similar to the opposition of to-day to the section of oral and dental surgery in the International Congress.

Section II—Dental education, literature and nomenclature reported.

Dr. Louis Ottogy gave a very long and exhaustive paper, embracing the replies to a request sent out by the association to the colleges of the country, requesting them to extend their term to a period of nine months.

As nearly as could be gathered from the reading, the majority of the colleges favor extension of the term. He also gave a very full résumé of the requirements of all the European countries.

He also congratulated the association on the progress made in dental literature as manifested in the excellence of the periodical literature, and closed by an earnest appeal for an improvement in our nomenclature, and recommended that this branch be specially referred to the International Congress.

Dr. Atkinson followed with a paper on nomenclature. Subject “Radiance in Functional Bodies,” and it was presented in flocks of atoms, flocks of corpuscles, flocks of coronas, flocks of filaments and flocks of molecules, with plus and minuses in such volumes that it was comprehensible to the consciousness of very few, if any. •

Dr. Crouse read a paper on the “Kindergarten in Dentistry,” stating that education was an accumulator of knowledge, wise or otherwise, and that what the student learned in college was of no practical use in the ordinary affairs of life, and asked the

question why self-made men outstrip in life's race, the rich and the college educated. Dental colleges should be a kindergarten, educating the hand and the head. The paper was thought, and characterized as rather elementary for the place.

Section III—Operative dentistry, was reported by Dr. Darby, who regretted that there had not been any papers on the subject handed in. He thought perhaps it was somewhat due to the impression abroad that the association was the place only for original research in scientific matters. He, however, claimed that operative dentistry had done much more for the saving of the teeth of humanity than scientific research.

The great need of the profession is a good and reliable plastic filling material, and he thought that a portion of the funds of the society could be put to no better use than a competent experimentation in this line; also a great want was a good and reliable obtunder for sensitive dentine, and he knew none better than hot air, but the difficulty was the want of suitable apparatus.

The subject was continued at some length, running off into the regulation of irregular teeth.

The other sections will be taken up in due time and relegated to the regions of light or darkness, the accumulated gas of the year be blown off, and all return home relieved, refreshed; but the close proximity of the International will cause a fresh invocation upon the good angels, who, bye the bye, I presume whisper in my ear that the most of the old officers will be re-elected, and that Dr Frank Abbott will be the next president of the association.

CENTRAL.

AMERICAN DENTAL ASSOCIATION.

NEWARK, N. J., August 17, 1887.

EDITOR ARCHIVES.—I am quite provoked to learn that through some delay my letter from Niagara did not reach you in time for the August number as was intended. Fresh news is the best news.

Old Point Comfort was selected for the next place of meeting, and the officers and executive committee have been authorized to arrange for a joint meeting with the Southern Dental Association, and a little later time than the first week in August, it is suggested would be agreeable to all parties concerned.

I am quite sure I voice the sentiment of the Association when I say it is earnestly hoped that this joint meeting may be the largest and best meeting ever held by dentists, and result in the existence of one grand national association, knowing no East, no West, no South, no North, and let all the people say amen.

The election resulted in the return of the old officers, excepting, of course, the presidency. When there are so many anxious to fill this exalted place it can only be held for one term.

The secretary and treasurer will be retained so long as they are willing to serve the Association; none can be found more capable or more worthy—they are good and faithful servants.

Prof. Abbott was elected President almost unanimously, as it should be. A man should be found who is worthy of the place, and then, as in this instance, he should be placed there with the hearty good will of all.

One thousand dollars was voted unanimously at the disposal of the executive committee for the purpose of defending any member who may have suit brought against him by the International Tooth Crown Co., who pretend to own patents covering all crown and bridge work.

Two hundred dollars was voted to Dr. Miller of Berlin. This amount is the offer of the Association for the best original paper, and some three or four years ago this prize was voted to Dr. Miller, but for some cause at the tail end of the meeting when very few were present it was reconsidered. So justice is done at last, and the Association is glad of it, for it was felt it had not pursued an honorable course.

The sections continued their work, and Dr. Harlan, chair-

man of section 5, read an excellent paper in continuation of the series he has presented in part on "Dental Materia Medica," but as my notes of the meeting have been lost I can only refer to it, and also to the papers of Dr. Brophy on "Pathology," and Dr. Harroun on "Mechanical Dentistry," the latter commending very highly the cast aluminum plates of Dr. Carroll, of Meadville, Pa.

These plates, as cast by Dr. C. certainly give a new hope for metal plates and the banishment of rubber ones—so may it be.

Every section reported, and did so when called, and thus by a little extra exertion all the work of the Association was done in three days, and it was conceded by all to have been a very successful meeting, and Dr. Allport's administration was voted a success.

CENTRAL.

CONNECTICUT VALLEY DENTAL SOCIETY.

The Connecticut Valley Dental Society will hold their next annual meeting at Hotel Warnick, Springfield, Mass., October 27 and 28. A cordial invitation is extended to the profession.

GEO. A. MAXFIELD, D.D.S., Secretary.

Holyoke, Aug. 25, 1887.

SOUTHERN DENTAL ASSOCIATION.

HYGEIA HOTEL, VA., September 2, 1887.

EDITOR ARCHIVES.—"Is life worth the living?" Yes, if it be at the Hygeia Hotel, Old Point Comfort, Va., and you are the guest of the Southern Dental Association. The State Dental Society of Virginia invited the Southern Association to meet with them here this year, and the result is a very large meeting, their being some three hundred and fifty dentists in attendance. A large delegation from the North is here, including Drs. Atkinson, Pierce, Shepherd, Allport, Taft, Mar-

shall, Bonwill, Harlan, Walker and Stockton. Dr. Frank Abbott, the President of the American Dental Association, would have been present, but was detained at home by illness in his family. Everyone was received with great cordiality and treated with magnificent hospitality.

Dr. Thackston, the President, presided with grace and dignity. The doctor is the oldest living graduate of a dental college, and is a true type of the real Southern gentleman. I regret very much that I did not arrive in time to hear the President's Address or the response by Dr. I. H. Prewitt, both of which are spoken of with universal commendation.

Oratory in our country is becoming a lost art, but the speech of Dr. Prewitt in accepting the office of Vice-President showed that there is at least one orator in the Southern Association, and my regret at not hearing him in his prepared speech was enhanced.

When I arrived Dr. Baldwin, of Chicago, was reading his paper on "Root Filling." The paper was listened to with marked attention, and solicited much discussion. A thorough cleansing, drying with hot air, and filling root with gutta percha, was advised.

He believed that a few reliable remedies were better than a great multiplication, as seemed to be recommended by some in authority as teachers.

The discussion which followed showed most conclusively that the treatment of pulpless teeth was as varied as the number of speakers.

Some recommended the enlargement of the pulp chambers by drilling, while others claimed that there were many roots that it was impossible to drill, some believing the canal should be reamed out as straight as a gun barrel and others claiming it was not all necessary, as crooked roots could be filled with as much certainty as straight ones.

The various remedies mentioned included all the known and unknown, but all inclined to the opinion that *hot* air is the best thing with which to treat a pulpless tooth before filling, and that gutta percha softened in chloroform the best filling for the

pulp canal. Some claimed, as they always will, that with this treatment they never—no never—had a failure, but your genial McKellops believed that no man could raise his hand in the presence of his fellows and say: "I have no failures," and the congregation said Amen!

Dr. Staples, of Texas, read a very excellent paper on "Lack of Thoroughness," and believed that failures were due to this rather than incompatibility of filling material to tooth structure. He also believed that dentists were born—and many of them were borned slovenly and had always remained so. He said there were many all-gold cranks, sacrificing frail teeth to destruction, because they will use nothing but gold—thoroughness is everything, but especially with the business end of the dental engine.

Dr. Thos. H. Parramore, of Hampton, Va., read a paper on "Sponge Grafting," and the special point of interest was the recommendation of the sponge graft in the treatment of exposed pulps. It is a new thought, and as my Texas friend said, "One swallow does not make a Summer, or one bed-bug a hotel," yet it is well worth a trial.

Dr. Winkler read a paper on "Soft Foil," and claimed that a cavity requiring a half an hour to an hour to fill with cohesive foil could be as effectually stopped with soft foil in one-third the time and believes it saves teeth better than any other form of gold, and is the material for all fillings except when contour work is desired.

Then ensued the old discussion on gold, as to what made it cohesive and non-cohesive. Dr. Morgan demonstrated that cohesive foil could be made perfectly non-cohesive by the fumes of ammonia, and believes that everyone should know how to use one as well as the other, and that some cavities can be better filled with non-cohesive foil, yet no man can do good work, as it is required to-day, without the use of cohesive foil.

Dr. J. B. Hodgkins, of Washington, gave an excellent paper on Amalgam.

Dr. Beadles, of Virginia, read a paper on "The Old and the New."

Contrasting the old way, by the use in many instances of the forceps and the loss of the teeth, and the new way, by saving the same with a golden crown clean, bright and useful.

Dentists were mechanics in the old time; now they were cultured and educated.

He believed that dental colleges should not employ young men just graduated for demonstrators, but should employ men of knowledge and experience for the responsible position.

The recognition of dentists by the Medical Association and the International Medical Congress were great strides for the "new."

Dr. Dunlap's paper on "Dental Hygiene" solicited much attention and was discussed at great length.

He believed text-books on the subject should be in the public schools of our country, and that the teachers should not only require clean faces and hands, and hair well brushed, but that the teeth also should be clean. He said it was now impossible to find a mouth not requiring dental care. Our great duty to-day is hygienic education of the people.

Dr. R. Finley Hunt would turn the cycle of time backwards, and have mothers about to bear children, live as the mothers of the forest lived, and the teeth of her offspring would be better.

Dr. Morgan believed there was a good deal of humbug about this matter of lime salts in food, as the mineral matter taken into the body in a single year was quite enough to keep it for the seven in which it was claimed an entire change in the economy took place.

Many of the speakers claimed that dental hygiene and dental prophylaxy were *the* important questions of to-day.

Dr. J. J. R. Patrick, of Belleville, Ill., occupied the attention of the Association in demonstrating his system of regulating teeth, and said that deciduous teeth have nothing to do with the development of the permanent set, and that the deciduous

teeth are exuviated as the horns of a stag, and are not shed by the absorption of the roots.

Dr. Atkinson controverted the idea, and said Dr. Patrick's generalizations do not cover the process of the removal of the deciduous teeth.

That they have any direct connection with the development of the permanent set is not advocated by any competent histologist, but that they are a necessary part of the machinery of nature was undeniable.

Dr. Patrick's generalizations are correct when we read between the lines and feel the tropes which he makes in his beautiful poetical flights as naturalist.

But, dear ARCHIVES, I must close with the hope that this will reach you for the September number.

The invitation of the American Dental Association for a joint meeting next year was accepted, and Louisville, Ky., named as a suitable place for the meeting, and the Fourth Tuesday of August as the time, but all the details for the meeting were placed in the hands of a Joint Committee of Arrangements.

Dr. B. H. Catching, of Atlanta, Ga., was elected President; Dr. J. H. Prewitt, of Madisonville, Ky., First Vice-President, and Dr. W. N. Morrison, of St. Louis, Second Vice-President.

To-morrow the Association and its guests are the guests of the Virginia State Society and are to be taken from here by steamer to Washington, and a delightful and happy day is surely in store for all.

"CENTRAL."

THE DANGER OF SUBMUCOUS INJECTIONS OF CHLOROFORM.—Dop and Guillot have advised the injection of five or six drops of chloroform beneath the mucous membrane of the gums for the relief of toothache. But Blocq asserts that this procedure is not free from danger, and relates a case in which it was followed by extensive and painful swelling of the face, with necrosis of the mucous membrane of the upper lip and gum, resulting in prolonged suppuration and superficial necrosis of the jaw.—*Centralblatt f. Chirurgie.*

EDITORIAL.

INSTRUCTION FOR PATIENTS.

It is important to instruct our patients in regard to their teeth, but they will not read pamphlets or long papers. I keep a supply of something like the following in leaflets for distribution among my patients which I think has benefited them as well as myself:

TO MY PATIENTS.

Teeth that are filled will decay again if exposed to the same causes that produced the original decay.

Your teeth are filled with an indestructible material, and decay can be prevented by careful watching and cleansing.

Have your teeth examined often. A small filling is less expensive than a large one, less painful to insert, and there is a better chance to save the tooth.

Cleanse the teeth every time food or anything else injurious to the teeth is taken into the mouth. Many medicines are very injurious to the teeth, therefore it is well to cleanse them after they have been in contact with medicines.

Use prepared chalk and castile soap with tooth brush and picks to cleanse the teeth, and to correct acid conditions, bearing in mind that absolute cleanliness is of more value than the skill of the dentist.

If you neglect your teeth the fillings are apt to fail, your dentist is unjustly blamed, and your most intimate friend will not tell you that you have a bad breath.

MORGAN ADAMS.

ZINC AMALGAM.

Amalgams containing zinc are not suitable for filling teeth. This may seem rather assertive, and doubtless some may disagree with my views on this question. A certain manufacturing establishment sends out an "amalgam exposé," giving the results of their analysis of the different brands, whether correct or not, must be left to the honesty of the firm or the ability of the analyst to determine for himself.

Those containing zinc are very popular, notably "King's Occidental." It is quick setting, white, and when first finished presents a beautiful appearance. The same filling comes back after a time with the surface pitted, edges ragged and looks generally demoralized. Why is it? I consider it due to the disintegrating influence of the galvanic action, destroying the zinc, that metal in combination with mercury being one of the principal constituents of certain galvanic batteries, the zinc furnishing the fuel to be consumed in the evolution of galvanic action. I may be wrong and would be pleased to hear from some one else on the subject.

Noticing the wasted condition of the zincs of the battery for my electric lamp suggested this theory which to me seems very plausible. Of course the less mercury used, or the dryer the amalgam is worked, the less marked will be the results of chemical action, but so long as the least quantity of the one with the other is present, so long do we have galvanic action and consequent imperfection in our filling. C. B. G.

INTERNATIONAL MEDICAL CONGRESS.

From our Washington correspondent we learn that the International Medical Congress now in session promises to be a success if numbers count for anything—being over 3,000 foreign and American doctors and dentists registered—a greater number of professional healers than has ever been seen at any similar gathering in this or any other country. The specialty

of dentistry is well represented, and the section of Oral and Dental Surgery promises to be one of the best in the Congress. A good room for holding the meetings of the sections has been secured and the arrangements for clinics are most ample and complete.

President Cleveland opened the Congress. Prof. N. S. Davis, of Chicago, was elected president, and everything points to a successful and harmonious meeting. The Association of College Faculties met on the third floor and after transacting some routine business adjourned to meet again on Monday the 5th, at 8:30 A. M. The following dental schools were admitted to the Association: Northwestern College of Dental Surgery, Chicago; Dental Department of the Northwestern University, Chicago; Indiana Dental College, Indianapolis; Louisville Dental College, Louisville. All the colleges belonging to the Association are represented, and a lively time is anticipated.

A VALUABLE DENTAL LIBRARY.

The largest and most complete dental library possibly in this or any other land at the present day is owned by our esteemed friend, Dr. H. J. McKellops, of St. Louis. We have recently been shown a catalogue prepared by Dr. H. L. McKellops, the doctor's son. It is arranged in sections—German, French, English and American publications—in separate sections, each work being consecutively numbered, commencing with the alphabet, and the whole having a cross index of authors. The oldest publication which the library contains is a translation of Ambrose Parie's work of the XVI century, which was published in London in 1634. There are a great number of other old and prominent authors, as M. Bunon, 1743; M. Jourdain, 1766; C. F. Delabarre, J. B. Duvaë, Joseph Hurlock, 1742; Thomas Berdenson, 1770; John Hunter, 1771; Robert Blake, 1801; Joseph Fox, 1803-6, Nasmyth, Bell, Kocher, Waite, Parmley, Maury, Goddard, etc.

The library contains 295 notable works on dentistry ; at the end of the catalogue proper we find a list of dental journals, of which there are thirty-six different sets, commencing with the *American Journal of Dental Science*, all complete and embracing in all over seven hundred volumes. This set of journals comprises all the American publications named in Prof. J. Taft's Index to Periodical Dental Literature, and with this Index is very convenient and valuable, as any subject can be readily referred to. And still further, we find a list of transactions of associations and societies, thirteen in number, all complete making about fifty volumes, commencing with the American Dental Association, the London Odontological Society, 1856. The entire contents of the library numbers over one thousand volumes, all completely arranged and classified.

This library is the result of years of labor, and forms a part of the doctor's life work. No one, who has not been engaged in a similar undertaking, can justly estimate the cost and labor it enacts. Many of the publications have been out of print for a long period, and copies were secured frequently at a great outlay of money and time spent in correspondence with second-hand dealers in this and other countries. The sum of five dollars was paid by the doctor for a single number of the *News Letter* to complete his set. The doctor has been greatly aided in this work during the past year by his son, Dr. H. L. McKellops. The value of such a library to the student is invaluable. We wish there were more of them. ED.

THE TWENTY-SECOND ANNUAL COURSE OF LECTURES in the Missouri Dental College, St. Louis, will commence on Monday, October 10, 1887, and will continue into the following March. There will be a vacation during the holidays of about one week. Reduced railroad rates to those wishing to spend this vacation at home.

EXPERIENCE is a trophy composed of all the weapons that we have been wounded with. ANON.

BRIEF MENTION.

DENTAL DISEASE IN SAVAGES.—Dr. Whitney, writing from Honolulu, describes, in the *British Journal of Dental Science*, the bleached skeletons of Kauai, and points out that it is a great mistake to believe the “noble savage” enjoys an immunity from suffering due to disease affecting his teeth; in spite of the simple nature of his food and his out-door life, he still has toothache. Dr. Whitney found both superior and inferior maxillaries, but none had complete dentures. This does not take into account the loss of the anterior lower, and, less frequently, upper teeth, which were knocked out to express their grief at the death of a favorite chief, as was their universal custom in those times. Some had lost but one or two teeth, others the greater portion of the molars; while not infrequently the anteriors showed decay upon their surfaces, or had left the traces of alveolar abscess. In several cases traces existed of much suffering, caused by the eruption of the inferior third molars, and in several by the superior. One specimen showed the ravages of salivary calculi, but, as a general rule, there was but little tartar upon the teeth. No instances of erosion were met with, but many of the teeth were much worn by use. There was one case of ankylosis of the jaw. Several had exostosis. The effects of alveolar abscess were very frequently seen, sometimes leaving but a small opening through the outer plate of the jaw, in others the whole outer plate being gone. Dr. Whitney found the antrum to vary greatly in size. On the whole, the teeth were set in a regular arch, but there were a few instances of irregularity. In uncovering two skeletons lying side by side, it was seen that both were females one much older than the other, and in them the peculiar dental irregularity of the one was exactly repeated in the other.—*The Lancet*.

WESTERN DISTRICT DENTAL SOCIETY OF ILLINOIS.—The second annual meeting of the Western District Dental Society of Illinois, will convene at Macomb, Ill., October 11 and 12, 1887. Great preparations are being made for fine clinics, and all dentists are cordially invited to attend.

R. W. BAILY, D.D.S., Secretary,
Macomb, Ill.

THE suggestion of Dr. Eames is seasonable and to the point. Let us have clean instruments, a clean record, and a clear conscience. Listerine, so useful in the dental office, is one of the best, if not the best preparation for cleansing and disinfecting forceps and instruments. Use it either in full strength or dilute, according to the exigency of the case. It will not produce rust.—H. B. Van Dorn, Red Bank, N. J.

A PHYSIOLOGICAL CURIOSITY.—A remarkable case of "magnetic influence" recently came to light in this city. The party interested is noted for his truth-telling qualities. The young man in question was several weeks ago afflicted with a terrible toothache, and lost no time in hunting up a dentist to remove the refractory member. The tooth was extracted and perceived to be perfectly sound, but the pain ceased immediately on its removal. Several days after the above had occurred, the young man was startled with repeated thumps and bumps in the recently created cavity. They grew more frequent and painful, and he scurried for the dentist for a solution of the enigma.

On the stairs he met a stranger coming from the dental rooms, all smiles and apparently pleased with himself and the world. "Oh, ah, Nat, how are you?" said the dentist. "Say, I just used that long tooth of yours. A young fellow was in here just now. He ran to catch one of our Nashville horse cars, struck his face against the car and knocked out a tooth. I just substituted your tooth for the one he lost. Took a good deal of pounding, but it's all right; I guess it will stay."

When the young man had told of the peculiar sensation he had just experienced, the dentist declared it to be a clear case of magnetic influence.

DR. R. D. SEALS, of Ft. Smith, Ark., president of the Arkansas State Dental Association, and Dr. L. G. Roberts, of Eureka Springs, Ark., recording secretary of the A. S. D. A., called on us on their way to the Southern Dental Association and the International Medical Congress. They report that Arkansas will be well represented at both of the meetings.

A PRUDENT man is like a pin: his head prevents him from going too far. ANON.

A CORRESPONDENT, writing from a town in Aroostook County, says that his town does not know what it is to have a dentist, but would like to have one settle there. "He that increaseth knowledge increaseth sorrow."—*Lewiston (Me.) Journal*

MEDICAL colleges, fond as the profession is of reproaching them, have done more for the scientific education of medical men in our country than all causes combined.—*The Doctor*.

DR. RICHARD P. PERRY, the New York dentist who sued Mrs. Eugene A. Thompson for four hundred and forty-five dollars for professional services, asked one hundred and forty five dollars for one gold bridge and for repairing that bridge. The doctor was charged with being grasping, but I am sure it was not intentional; he had simply confounded the cost of building the Brooklyn Bridge with his own bridge work. He however recovered eighty-seven dollars and fifty cents of the amount from his fair patient.—*The Doctor*.

LADY DENTISTS.—The committee of the National Dental Hospital of London have resolved to admit registered lady Medical students to the practice of the hospital.

THE HAIRS OF OUR HEAD NUMBERED.—A German inquirer has, it is stated, taken four heads of hair, of equal weight, and then proceeded to count the individual hairs. One (red) was found to contain 90,000 hairs; another (black) 108,000; a third (brown) had 199,000; and the fourth (blonde) 140,000.

PAINLESS PULP PASTE.—E. C. Kirk, D. D. S., *Cosmos*, gives the following formula for a pulp paste, which he finds is painless, even when applied to an inflamed pulp.

℞ Acid arsenious, pulv.,
Cocaine hydrochlorate, - - - aa. gr. xx.
Menthol cryst., - - - - - gr. v.
Glycerine, - - - q. s. to make a thick paste.

MEN give me credit for genius; but all the genius I have lies in this: When I have a subject on hand I study it profoundly.

The effect I make they call the fruit of genius; it is, however, the fruit of labor and thought.—ALEXANDER HAMILTON.

POWER comes from persistent and repeated effort. When you can do something better than anybody else, you are acquiring power; and if you can do this easily and pleasantly, that is your calling.—D. P. BALDWIN.

OUR high respect for a well-read man is praise enough of literature.—EMERSON

EARLY DENTITION,—Dr. F. B. Morrill of North Berwick, Me., reports in the *Medical Record*, that a baby, six weeks old, cut a lower left central incisor, and in a week the right was through also. The other teeth appeared at the usual time.

Dr. A. Brothers, of this city, referring to the same subject, writes as follows: "My case was that of a child three weeks old with a hare-lip, in which the intermaxillary bone protruded. I operated for the deformity, notched with bone-forceps the misplaced bone, and forced it back to its proper place. Five weeks later, therefore at the age of eight weeks, an incisor tooth had cut its way through the portion of bone referred to. The cause for this seemed to be the increased activity which was set up by the operation."

TO MAKE a smooth hard-faced cast, coat the impression with collodion, then varnish with thin sandarac and fill without waiting to dry.

F. G. E.

THE general public wisely wags its head and thinks that the conflicting statements concerning cocaine made by Dr. Mattison, of Brooklyn, and Drs. Hammond and Bosworth of New York, forcibly illustrate the truth of the saying: "Who shall decide when doctors disagree?"—*The Doctor*.

THE FLOWER PIECE representing a huge set of false teeth, plate and all, presented to one of the graduating class of the New York Dental College, was unique—and horrible. Why would not a dental spittoon in flowers be equally appropriate?—*The Doctor*.

DR. HERMAN GEDICKE, of Newark, N. J., has sued Dr. Robert L. Burrage and Dr. Arthur C. Dougherty. They brought a charge of malpractice against Dr. Gedicke, but the Grand Jury failed to find an indictment. He demands damages to the amount of \$10,000 from each defendant.—*The Doctor*.

MANY of the students at the New York medical colleges complain bitterly of the inducements held out to them to pursue their studies in this city. Their chief complaint is that the cost of tuition, living, etc., quoted by the various college prospectus is not strictly in keeping with the facts. This matter is deserving of attention.

"Hepatic doctors now are seen no more,
The hunt for bile has long been given o'er,
Whoever would a reputation make,
Deserts the bile, the bugs to overtake."

—*Dr. Dewey*.

HYDROGEN PEROXIDE IN THE TREATMENT OF ULCERS AND SINUSES.—Dr. C. G. Roehr, of Milwaukee, Wis., writes that he has used peroxide of hydrogen with excellent results as a disinfectant and stimulant to old ulcers and sinuses. When injected into sinuses containing exuberant granulations, it destroys these, leaving uninjured the healthy tissues. There is very little pain, and a rapid improvement ensues.—*Med. Record*.

THE TEMPERATURE SENSE AND LOCAL ANÆSTHETICS.—Dr. I. Solis Cohen ("Polyclinic," Nov. 1886) has noticed a peculiar perversion of the temperature sense of the tongue and oral cavity, caused by strong solutions of cocaine. While still capable of appreciating heat, the patient cannot recognize cold and iced water seems of blood heat, or even warmer. Similar effects are reported by Dr. Goldscheider ("Berlin klin. Woch.") from experiments with menthol, and it is probable that all local anæsthetics have a similar action.—*Medical Standard*.

DISINFECTANTS—DEODORANTS—ANTISEPTICS—A disinfectant is an agent capable of destroying the infective power of infectious materials. Agents which merely mask unpleasant odors are deodorants, and their purpose is not the destruction of disease germs. Antiseptics are agents having the power to arrest the process of putrefaction.—*Technics* Feb., 1887

AN OLD Egyptian inscription says that "knowledge is medicine for the soul."

CHLOROFORM-WATER as a hæmostatic is finding more general employment with satisfactory results. C.

"THE RIGHT of anything takes care of the end of it."

SIR JAMES PAGET ON MASTICATION.—In a recent address on dental surgery, Sir James Paget dwells upon the high functions of the molars, which, he says, stand half-way between the dead and the living—that is to say, between the food to be consumed and the tissue formed by it. Upon them depends very greatly the character which will be given to those tissues. In other words, the mode in which we masticate has an appreciable effect upon our future physical condition. "Who knows how much those thirty-two bites which Mr. Gladstone is believed to take at every piece of meat which he consumes may have had to do with his bodily system, and hence, by no means indirectly, with the Irish question!"—*Medical Record*.

SOME time ago the Dental Hospital of London held their twenty-ninth annual meeting, when it was stated that during the past year no fewer than 43,745 cases had been treated. Sir James Paget presided at the dinner held in the evening, and observed that the hospital was, in his opinion, the best of its kind that could be found in Europe, or perhaps in the whole world. It also fulfilled a useful office as a school of dental surgery, and encouraged the study of dental science. Two of the finest scientific monographs in the English language, by John Hunter and Richard Owen, respectively, were due to the study of the teeth. He congratulated the dental profession on being now organized as a legalized distinct body.—London Letter to *Medical Record*.

FOR THE relief of nausea caused by taking impressions, the wearing of artificial dentines, etc. Dr. H. J. Fisk, of Portland, Conn., found the following very efficient in several exceedingly troublesome cases:—

R	Cider brandy	-	-	-	-	-	-	5ij
	Aquæ	-	-	-	-	-	-	5j

M. Sig. to be used as a gargle six or eight times each day for one week. For the second week following, use cider brandy full strength as a gargle. Also ten grains bromide potassium, in water, six times each day.

“SELF REVERENCE is not reverence of what we are, but of the higher nature, which reproves and condemns and abuses it.”

“IT REQUIRES a brave man to speak out, we are told. But it also requires a brave man to keep his mouth shut. It is vastly easier sometimes to speak out than it is to hold your tongue.”

REMOVING NITRATE OF SILVER STAINS.—Dip the fingers into a strong solution of chloride of copper. In about a minute the silver will be converted into chloride, and may be washed off with a solution of hyposulphite of sodium.—*Ex.*

"CULTURE comes of labor, not from idle dreams. High thinking comes of plain living more than from luxurious ease."

FEAR is more fear than the pain it fears.—SIR PHILLIP SIDNEY.

NITROUS OXIDE AS AN ANÆSTHETIC.—M. Laffont, in a recent communication to the Paris Société de Biologie, stated that nitrous oxide is a most dangerous anæsthetic. He has since further prosecuted his experiments; and, at a subsequent meeting, confirmed his previous statements. He has found proof that nitrous oxide is not an anæsthetic, but an asphyxiating agent, as MM. Jolyet and Blanche have proved. When this agent is used by dentists to produce anæsthesia, hyperglycæmia and glycosuria result. M. Laffont has verified these phenomena by personal experience. He has also ascertained that in animals these results take place before anæsthesia, during the period of deep breathing.—*Med. Record*.

WANTS TO STUDY MEDICINE.—Dr. J. B. Kell, of Delphos, O., writes: "Dr. S——, of our city, received the following letter from a reverend of Putnam Co., O., who desires to 'study medson.' I give it in full.

" 'H——, Putnam Co., O.

" 'Dr. S——.

"DEAR SIR: aS I think of StuDing medson, and am Aqanted With you By rep and aS you bore the name of A Criston I thout you Would be a good man to Sudy under and ASK you if thare Would Be Eney Chance to Have you fore councele I will fernish my oan books and Bord Ples ancer By retorn male and I will come up Yours in christ.

" 'REV. R—— P——."

"GO UP, OLD BALD HEAD."—What is more pathetic than to see the simple faith with which a bald-headed man will buy an infallible hair restorative from a bald-headed barber?—*Detroit Free Press*.

THE SAYING that "a little knowledge is a dangerous thing" is, to my mind, a very dangerous adage. If knowledge is real and genuine, I do not believe that it is other than a very valuable possession, however infinitesimal its quantity may be. Indeed, if a little knowledge is dangerous, where is the man who has so much as to be out of danger? HUXLEY.

PHENOL SODIQUE.—The composition of this is as follows :

Carbolic acid,	-	-	-	-	300 grs.
Caustic soda,	-	-	-	-	20 grs.
Water,	-	-	-	-	5 fl. drs.

—*American Druggist.*

SEDATIVE IN PAINFUL DENTITION.—

Cocaine hydrochlorate,	-	-	4 gr.
Sodium borate,	-	-	4 gr.
Syrup of althæa,	-	-	64 m.
Syrup of poppy, to make	-	-	100 m.

Rub the gums gently with a little of this syrup several times a day.—*L'Union Med.*

IT is impossible to be just, if one is not generous.

HE WHO possesses the love of his family, the respect of his friends, and who believes in God, has happiness enough to triumph over all possible misfortunes.—*From the French.*

"ACCORDING to Sir William Thompson, the sun is about twenty million years old, and it has about ten million years to live. We presume Emerson would say of this, as of the earth, that he could get on very well without it."

THE FIFTY-FIVE MILLION POPULATION of the United States have eighty-nine regular medical colleges, with about ten thousand medical students; eight of these medical colleges have each from three hundred to six hundred students, and seven of these colleges have from two hundred to three hundred students.

"THE EARTH is supposed to lose time at the rate of half a second in a century." When therefore will it stop?

MEN DO not go to paradise in coaches.—LONGFELLOW.

IT IS UNFAIR to judge harshly from a failure observed, and to gauge its author accordingly, for perhaps other operations from the same source might exhibit evidences of marked skill and sound judgment. Unfortunate it is, that some individuals are too ready to pass unfavorable comment upon the works of others, especially if in the least degree faulty, without possessing sufficient generosity to credit them for achievements that are eminently successful, and that bear the stamp of excellence.

DR. C. E. FRANCIS.

PEPSIN FOR CATARRH.—Recently one of our exchanges mentioned an observation made by a physician that pepsin was able to cure chronic and severe cases of catarrh pharyngitis. This discovery was made by accident. The physician prescribed pepsin for dyspepsia, and the patient noticed an improvement of his catarrh. Larger and more frequent doses, to ten grains of pepsin several times a day, were then given for the catarrh, and the physician had the satisfaction of curing an inveterate case of catarrh.

Ex.

It is reported that a process has been discovered by which copper may be welded.

WHAT IS MEDICINE?—The art of killing people without offending the police.

CAREFULLY guard the reputation of others. To do so is evidence of being truly enlightened.

HOMŒOPATHS AS READERS OF SCIENTIFIC MEDICAL WORKS.—A prominent publisher of regular medical works has said that he sold more books, proportionately, to homœopaths than to regular physicians.

WHY should not ducks be allowed on doctor's premises? Because they make such personal remarks.

NITRITE OF AMYL AS AN ANTIDOTE FOR OPIUM.—*L'Union Médicale* reports the case of a person who took two ounces of laudanum, and showed every symptom of opium-poisoning—coma, small pulse, feeble and infrequent respiration (six to the minute), coldness and cyanosis. Belladonna proved useless, while inhalation of nitrite of amyl immediately improved and ultimately restored the patient.

BOOKS RECEIVED.

THE AMERICAN SYSTEM OF DENTISTRY, in treatises by various authors. Edited by WILBUK F. LITCH, M.D., D.D., professor of Prosthetic Dentistry, Therapeutics, and Materia Medica in the Pennsylvania College of Dental Surgery, Philadelphia. Vol. III. Anæsthesia and Anæsthetics, Physiology of Digestion, Voice and Speech, Associate Dental and Oral Pathology, Oral Surgery, Eruption of the Teeth, Materia Medica and Therapeutics, Metallurgy, Jurisprudence. With 301 illustrations. Lea Brothers & Co., Philadelphia. Price, \$6.00.

LIST OF PATENTS.

For inventions relating to dental interests, for the month ending July 25, 1887, reported expressly for the ARCHIVES OF DENTISTRY, by Louis Bagger & Co., mechanical experts and solicitors of patents, Washington, D. C. Advice free.

365,811, dental flask, A T. Hawley, Waterford, N. Y.; 365,859, dental bracket, C. B. Porter, Bay City, Mich.; 365,484, dental engine, Alexander Jamieson, London, Eng.; 366,759, inhaler, Jas. Byrnes, National Soldiers Home, Va.; 366,838, artificial ear drum, Benj. N. Huestis, New York, N. Y.

A PHARMACEUTICAL SPECIALTY FOR DENTISTS.

LISTERINE.

FORMULA.—Listerine is the essential antiseptic constituent of Thyme, Eucalyptus, Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-boracic Acid.

DOSE.—Internally: One teaspoonful three or more times a day (as indicated), either full strength or diluted with water, or in combination with other drugs. As a local application to ulcers, wounds and abscesses, or as a gargle, mouth-wash, inhalant or injection, it can be used ad libitum, diluted as necessary for varied conditions.

Antiseptic, Prophylactic, Deodorant, Non-Toxic, Non-Irritant, Non-Escharotic, Absolutely Safe, Agreeable, Scientific, and Strictly Professional.

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of preventive medicine—individual prophylaxis,

AND THE REQUIREMENTS OF GENERAL

DENTAL ✦ PRACTICE

LISTERINE IS A

Perfect Tooth and Mouth Wash,

NON-SECRET AND PROFESSIONAL,

And therefore has received the Highest Recognition as the Best General Antiseptic for a

DENTIST'S PRESCRIPTION.

Dentists interested in LISTERINE will please send us their address, and receive by return mail, post-paid, our new and complete pamphlet of 36 quarto pages, embodying

A TABULATED EXHIBIT of the Action of LISTERINE upon inert Laboratory Compounds;

FULL AND EXHAUSTIVE REPORTS and Clinical Observations from all sources, both Medical and Dental, confirming the utility of LISTERINE as a general Antiseptic for both Internal and External use; and particularly

MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various Antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. Miller, A. B., Ph. D., D. D. S., Prof. of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

LAMBERT PHARMACAL COMPANY,

16 OLIVE STREET,

ST. LOUIS, MO.

To the Dental Profession.

GENTLEMEN :

After having practiced Dentistry for fourteen years I determined in 1866 to make a Specialty of Dentifrices, with a view of producing an article which should not only be acceptable to the general public, but also be approved and indorsed by the Dental Profession.

In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

They will be found in all the leading stores where such goods are sold, and where Dentists can recommend their patients to call for them. This obviates the necessity of Dentists keeping such preparations, which has proved by experience to be generally unprofitable. I should be pleased to forward a sample of my TABLETS or POWDER to any Dentist, free of expense, on receipt of a postal card giving address, that all may have an opportunity to test its merits. I am,

Respectfully yours,

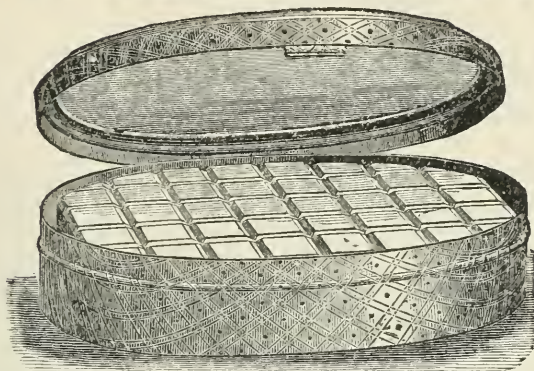
I. W. LYON, D.D.S.,

88 MAIDEN LANE, NEW YORK.

New York, March 1, 1884.

ESTABLISHED 1866.

DR. I. W. LYON'S TOOTH TABLETS



For Purity, Efficiency, Neatness and Convenience these Tablets have no equal as a Dentifrice. They are put up in Seamless Metallic Boxes, which are impervious to air and moisture, and may be carried on a journey without danger of breaking.

HIGHLY INDORSED BY EMINENT DENTISTS.

PRICE 50 CENTS A BOX. SOLD BY DRUGGISTS AND DEALERS GENERALLY

DR. I. W. LYON'S PERFECT TOOTH POWDER



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The Faculty would especially recommend that all first-course students attend this and the spring course.

THE REGULAR WINTER OR SESSION will begin Monday, October 3, 1887, and continue until the fourth Wednesday in February, 1888, with a short recess at Christmas.

THE SPRING SESSION begins the first Monday after the close of the Winter Session, and ends the 28th of April. The work of this session is entirely practical; no lectures are delivered.

The lectures and clinical instruction in the Infirmary and Laboratory will fully occupy the students' time, to which they should be prepared to devote their undivided attention from the beginning of the session.

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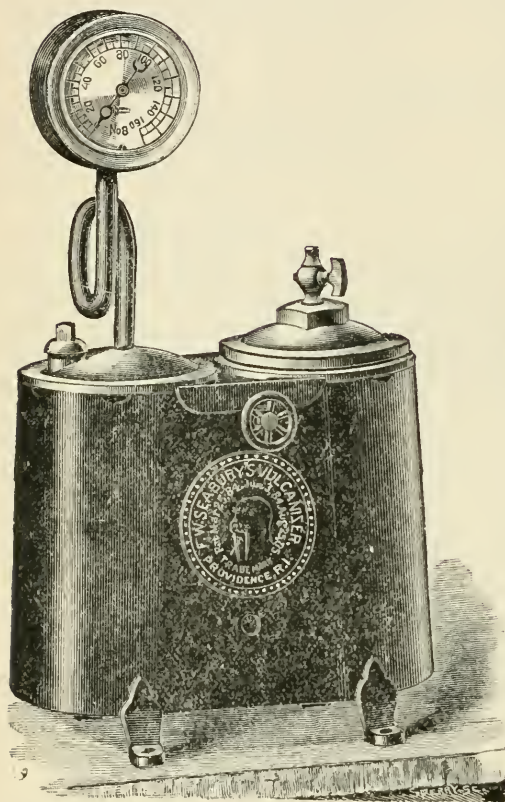
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THE Archives of Dentistry.

A MONTHLY RECORD OF DENTAL SCIENCE AND ART.

VOL. IV., No. 10.] OCTOBER, 1887. [NEW SERIES.

ORIGINAL ARTICLES.

CERTAINLY IT IS EXCELLENT DISCIPLINE FOR AN AUTHOR TO FEEL THAT HE MUST SAY ALL HE HAS TO SAY IN THE FEWEST POSSIBLE WORDS, OR HIS READER IS SURE TO SKIP THEM; AND IN THE PLAINEST POSSIBLE WORDS, OR HIS READER WILL CERTAINLY MISUNDERSTAND THEM. GENERALLY, ALSO, A DOWNRIGHT FACT MAY BE TOLD IN A PLAIN WAY; AND WE WANT DOWNRIGHT FACTS AT PRESENT MORE THAN ANYTHING ELSE.—*Ruskin*.

PREPARATION OF GOLD FOR FILLING.

BY D. H. DAY, D.D.S., MINNEAPOLIS, MINN.

There are so very many ways of preparing gold for filling purposes, that it becomes rather a difficult matter to designate any particular way or method as the best; for it is, after all, more a matter of manipulation than any particular method of preparing the gold.

And yet there are certain principles that ought to be borne in mind and carried out all through the operation, if we wish to obtain not merely good results, but the best results possible.

In using gold on the cohesive principle, we are imitating one of the trades-workers, who, years ago, used to usurp the dentist's profession to the small extent of extracting a tooth now and

then—I mean the blacksmith. We weld our gold as he welds his iron or steel, with this exception; we weld our gold cold, while he must have his metals heated to a white heat.

The first essential in welding metals, either hot or cold is, that the two surfaces to be brought in contact shall be perfectly clean and bright. This the blacksmith insures by the use of borax, and the dentist by annealing.

The next essential is that the surfaces to be united be brought into perfect juxtaposition, and pressure applied. If these principles have been carefully carried out, perfect union then results.

The blacksmith takes care to have the two surfaces which he wishes to unite, as nearly even and smooth as possible before he attempts to weld them, because he knows if the surfaces are not perfectly even, that it will require just that much more force to bring them into contact and secure a perfect union.

The blacksmith uses a broad smooth-faced hammer in his welding, for if he used, for instance, a stone dresser's hammer with sharp teeth, he would make a sorry looking job of it, and get but a poor union, as the metal would only cohere where the points struck, and there would be many places where there was not only no cohesion but no contact whatever.

Now, just these principles exactly apply to the working of cohesive gold. The more the surface of the gold is crinkled and uneven, the harder it is to get a perfect cohesion, and much more force must be used to accomplish the same result than when the gold is folded in perfectly even layers. If the gold is used in such form, the thickness of the layers that can be easily and perfectly welded, will be surprising.

Pluggers should have very shallow and smooth serrations, barely enough to prevent them from slipping, and thereby burnishing the surface of the gold. If such pluggers are used and the gold used in some form where the surface is kept smooth and even, a perfectly solid filling will be the result, entirely free from pits. Great care and some dexterity are required in manipulating to prevent the gold from crinkling and forming angles that are hard to break down. If you

wish to see how much resistance there is to such angles, and how difficult it is to break them down, just take a piece of ordinary writing paper and crumple it up in your hand, then lay the little wad upon the table, and with the palm of your hand try to flatten it out. You will be astonished at the amount of resistance that it will offer, and the amount of force necessary to flatten it.

It is the same with gold exactly, only in cohesive gold the angles are even harder to break down on account of stickiness.

These facts are all self-evident, and from them I have deduced these principles.

In the preparation of the gold it should be borne in mind that the foil should lie in regular layers and that any crinkling or unevenness makes a difference in the density of the filling at the point where it occurs. The foil may be prepared by folding it or rolling it into cylinders (not crumpling it into pellets) as long as the principle is not broken through.

But let me say just here, if the proper pluggers are not used, it is only "love's labor lost," for by the use of sharp serrations or fine points, you will break up the smooth, even surfaces which you wish to preserve, and your filling is bound to have pits in it. The sharp serrations force minute holes in the gold and unless the serrations strike in exactly the same place the next time, the small hole will only be covered up and not filled up, and the filling will be a veritable honeycomb, and no amount of dressing will remove the pits permanently.

I am glad, however, to see a very marked tendency among the more intelligent dentists, towards the shallow serrations and broad-faced pluggers.

In working soft gold—and by soft gold I don't mean semi-cohesive gold, but gold in which the cohesive property has been entirely obliterated—there are but two ways of preparing it to get good results, in strips or cylinders. It should lie in the cavity with the "grain," so to speak, running all one way. That is, the layers of foil should be parallel with the sides of the cavity, or from the bottom to the top. As there is no co-

hesion or union between the layers of gold, any attempt to pack gold upon the top of the filling would be foolishness. It must be forced or wedged in between the layers of gold already in place, by wedge-shaped instruments.

The cohesive gold pluggers are as useless in using soft gold as the soft gold instruments are in working cohesive gold. The number of dentists who use soft gold in the old style nowadays, is, indeed, few and far between, and I really regret to see it so, for I believe that soft gold in the right place, and used in the right way, is superior by far to cohesive gold.

But whatever gold you use, and whether you use hand pressure, the electric, automatic or primitive mallet, keep the correct principles in view in the working and preparation of it, and you will have a solid filling, free from pits and flaws.

The margins, contour and permanency will depend entirely on the operator's manipulative ability and good judgment.

FEEDING INFANTS.

BY MRS. H. M. T. CUTLER, M. D.

Health being the unit of life, and disease a fraction only, whatever builds up a strong, healthy frame must be of importance to each and every part of our being.

Hence, if apology were needed for this communication, it must be found in this, that if the body in infancy is free from disease, that is, all its parts are whole, the chances for a continuance of health in all the organs, are far greater than where the early infancy of the child has witnessed imperfect assimilation of food, and consequent formation of such gases as lead to much suffering and to imperfect organization, or it may be corrosion of some or all its parts.

Many mothers are lacking in strength to produce sufficient nourishment for the early months of the life of their offspring, lactation being not only insufficient in quantity, but deficient in quality. To attempt to nourish their children at the ex-

pense of their own strength is unwise, if they can be as well, or even more perfectly nourished by artificial means. We have many advertisements of prepared foods for infants, all of which the careful mother rejects. And yet, it would be an unspeakable boon if she knew some simple and safe method of preparing such food as should give her child a vigorous frame, and an infancy almost free from pain. Having in view such a case, where the mother's milk ceased when her child was about a month old, and recourse to the bottle became imperative, it seemed, as the case was eminently successful, that it would be a kindness to many to be made aware of the methods pursued. The first step was to secure cow's milk of a uniform quality which, during the winter, was attained by a special bargain with the milk man to furnish the milk from one cow, recently come in. Then a small sack of wheat bran was procured, and from about a pint of this clean, fresh bran a tea was made daily by boiling it till it became slightly starchy. This was strained off, and about an equal quantity of milk and bran tea was used, sweetened about like mother's milk. On this diet alone the little one subsisted and thrived till five months old, when a diet of panado, made of well-baked wheat bread, boiled in water and sweetened, with a little nice fresh butter added, gave a little variety. I have never seen a child stronger, or more free from the ills that ordinarily afflict infancy. Nature seems gradually and carefully preparing for dentition, but no teeth have as yet made their appearance. While the little fellow shows some uneasiness with the gums, there has been, thus far, no disturbance of the bowels, and no febrile symptoms.

While it is undoubtedly ordinarily well for mothers to nurse their children, where the conditions of life are comfortable, and the mother's health is good, yet there are many children who would be much better off through the months of infancy, if they were not compelled to rely on the insufficient food drawn from an overworked and overheated mother, whose food is often such as to interfere with the wholesome quality of the nourishment furnished her offspring. One might also

instance the effect of the emotions on the quality of the mother's milk, often poisoning it to a degree fatal to her babe.

This preparation of which I have made mention is peculiarly valuable, as furnishing a good amount of silex, besides starch and gluten which goes into the structure of the viscera, as well as into the structure of the bones and teeth.

A knowledge of this fact alone is of great importance in the preparation of food for the young. While a larger amount of fat and sugar is consumed in proportion to the so-called plastic elements than in adults, owing to the arrangement for rapid growth, which means rapid metamorphosis of elementary substances, care must be taken not to ruin the powers of digestion by furnishing too great a proportion of plastic, nitrogenous matter. I have seen infants suffer from dyspepsia, just as truly as adults, the result of feeding too great a proportion of caseine to the saccharine and oily constituents of food. Hence in feeding cows, milk, some form of dilution becomes essential to the maintenance of health, and in a long experience, I have seen nothing better than the one suggested.

If a dyspeptic stomach proves the ruin of teeth in adults, why should not the same hold good in regard to first dentition, and also prove injurious to the growing structure of the permanent teeth;

DENTAL MICROSCOPY AND HISTOLOGY.

BY DR. GEO. H. M'CAUSEY, JANESVILLE, WIS.

The hardening processes mentioned in the August number of the ARCHIVES are simply preliminary to another process known as embedding and which is equally necessary for the production of sections sufficiently even and thin, and also to prevent change in the elements by drawing or tearing, few tissues being sufficiently dense and unyielding to resist the pressure of the keen-edged section knife sufficiently to permit an even section to be cut without it. The embedding substance

must be of a character which, while it will not resist the action of the knife, will be sufficiently so that it will hold the tissue to be cut, firmly in place while being cut.

Various agents are used for the purpose and each has its own advantages dependent upon the character and density of the material to be cut.

The most common embedding agent in use is paraffine, as it is better adapted to all kinds of work than most others.

It is used either in a pure state or in combination with the different fats or oils to render it more soft and yielding as occasion requires. The proportions depend upon the temperature of the atmosphere as well as the consistency of the material to be cut, and therefore no fixed rule can be given. It must be determined by experiment to a certain extent. The young histologist can with profit purchase a little work from the pen of Dr. Frank L. James, of St. Louis, on the subject of elementary technology. Its title is: "The Technical History of a Slide." Its cost is but 75 cents, yet its cost in cents can be reckoned in dollars when its usefulness to the histologist is taken into consideration. In fact, its value can hardly be over-estimated. The amateur cannot generally afford nor does he need a machine microtome for cutting his sections. One of the hand section cutters will suit his purpose better while the cost is nominal when compared with that of an elaborate machine microtome. The one patterned after the army medical museum instrument is the one in most common use. The writer uses one made by Mr. Bullock, 99 West Monroe Street, Chicago, Ill., and finds it a very efficient instrument. It is simple in construction, well made, truly working and not liable to get out of order. It consists of a tube of brass, termed the well, the interior of which is turned out absolutely true in diameter its entire length. In this well is fitted a brass plug which admits of no lateral motion whatever while its vertical motion is entirely free. This motion is given by a delicate screw passing through a brass cap covering the bottom of the well and the screw is operated by a graduated milled head. Attached to the rear of the well is a clamp by which to secure

the instrument to the work table that perfect steadiness may be secured. At the top of the well and at a right angle with it is attached a plate of brass in which is inserted a plate of polished glass, also at a right angle with the well.

Both plates are pierced with a hole of the same diameter as the interior of the well, and forms a continuation of the same. It is in the well that all material to be cut is embedded in one or another of the various agents used for that purpose. The embedding material rests on the brass plug which is moved vertically by the action of the screw until the material is raised to a sufficient height to be in contact with the section knife when passed along the flat surface of the glass plate. By proper manipulation of the milled head sections of the least possible thickness may be made, a good section knife is of prime importance, yet fair sections may be made with a good razor if sufficient care be used. Knives for the special purpose are made flat on one side and concaved on the other and are sufficiently thick that they do not spring under the necessary pressure in cutting. They are made for cutting to or from the operator, the hollow side being in all cases uppermost. It should be of excellent temper and of the keenest edge, otherwise the sections will be uneven and torn. The best results can be secured only by the closest attention to details and the writer would therefore impress upon all who attempt section cutting the necessity for keeping the knife in the most perfect order possible.

PAINLESS DENTISTRY.

BY ALFRED T. PEETE, BRANCHVILLE, S. C.

Hearing that some of our brethren elsewhere have lately been disciplined for advertising and professing to practise "painless dentistry," one is reminded of the declaration of a certain Western physician, as recorded in one of our dental journals some time since. This gentleman is of the opinion

that it is the duty of every medical man to teach all dentists within his reach the true principles of painless dentistry. He further holds that a physician should be consulted in every case of odontalgia or other pathological condition of the oral cavity and its organs. When proper orthodox treatment had produced its invariably beneficial results, the patient might be turned over, if necessary, to the "repair shop" of the dentist.

It would ill-become a humble "mechanic" of the dental persuasion to dispute the conclusions of so high an authority, so the writer will merely remark that he was reduced to a state of much mental confusion, and his faith greatly shaken, by the relation of the following incident a short time since. It was seriously imparted to the writer by the person who treated the case—who is, by the way, a successful physician, as well as a very worthy gentleman:

"The man came to me," said he, "with a severe pain in one of his lower jaw teeth, which was somewhat decayed. I told him, *of course*, that the nerve of the tooth must be destroyed, the first thing. So I took a vial containing, perhaps, an ounce and a half of nitric acid, and ordered the patient to keep perfectly quiet, while I poured a drop of the acid into the cavity.

I had confidence in my steadiness of hand, and knew that I could pour out a single drop without any difficulty. Just as I had the neck of the bottle close enough to the tooth, the man made a sudden movement, and at least an ounce of the acid was spilled in his mouth. But I seldom lose my presence of mind, and I promptly seized a handful of carbonate of potash and crammed it into his mouth. No material damage was done, and the tooth has never ached since."

Nothing was left us to do but to congratulate our medical friend on his remarkable presence of mind, and to agree with him that the nerve of that tooth was not likely to ache again very soon. But now the writer is once more at sea on the question of "painless dentistry."

Perhaps, it is only "Western physicians" who can teach us the art. Couldn't they be induced to give us more light?

LITTLE THINGS.¹

Little things tell the story of success or failure and make or mar our happiness.

The professional man stamps himself on the public mind and public heart just in proportion as he appreciates the importance of little things, in his daily work. The young man just opening his office and offering his services to the public too often overlooks the magnitude of little things and neglects the opportunities offered while seeking some grand operation.

Many have failed through want of appreciation of the importance of little things and for that reason I desire to call attention to some of the steps over which we have stumbled, that those who are younger may walk with safety.

The dentist should present a neat personal appearance, with clean hands and an attractive office surroundings, as these little things are the stepping stones to future greatness.

A tooth is a little thing, a little bundle of cells, blood-vessels and fibers, yet its preservation will tell the story of the future usefulness, health and beauty of the individual.

The complete arch is necessary to fully meet the requirements of the entire system, and in proportion as this is broken, extra work is thrown upon other parts. I fear there is too low appreciation of the value of a single tooth and the part it plays in the economy of the entire whole.

Extraction is often a necessary evil, but as an evil it should always be considered and advised only to relieve serious trouble. Thus the first thought I would seek to impress is the value of this little thing we call a tooth.

It is a little thing to have and use clean instruments and forceps, but this is demanded not only by common decency but by the laws of health and the safety of our patients. We know not how often the germs of disease are carried from mouth to mouth by the use of blood-stained forceps or foul excavators or burs. To have a sweet-sinelling bowl or cuspadore is a

¹Abstract of a paper by Dr. G. M. Twitchell, read before the Maine Dental Society, July 20, 1887.

trivial matter, yet the want of this has lost many a man the patronage of wealthy families.

An artificial plate is small in size and too often rendered necessary by the gross carelessness or neglect of some operator, yet when all difficulties have been overcome and by careful study of the complexion, the form and structure of the mouth we are able to imitate nature so closely that the thought of artificialness is forgotten or unobserved, then all littleness vanishes.

A speck of tartar is a little thing, sadly neglected, but behold how great a flame a little spark kindleth. The loss of the natural teeth and destruction of the alveoli cannot be measured by dollars and cents. No money value represents their worth or importance, yet neglect the little nodule of tartar and complete destruction follows.

THOROUGH EXAMINATION.

BY DR. ELBRIDGE C. LEACH, BOSTON, MASS.

Can anything too forcible be said on this point? Can there be anything more humiliating to the dentist than to look the patient's mouth over and then have the patient point out the one trouble for which he visited you? Can the dentist do better than to spend ample time on his examinations; pointing out the work which should be done at present and taking good care to call the patient's attention to whatever work the dentist may discover which does not require immediate care; for instance how often do we discover imperfections which do not require attention at once, like superficial decay on the neck of a tooth which it would be unwise to fill at the time of discovery, making a strong point of calling your patient's attention to it and to the fact that it does not require attention at once in the way of filling. How often do patients return after the completion of a course of operations and point out an apparent oversight of yours and thus imply your inefficiency in examination.

SOCIETIES.

NINTH INTERNATIONAL MEDICAL CONGRESS, HELD AT WASHINGTON, D. C., SEPTEMBER 5, 6, 7, 8, 9, 1887.

(From advance slips supplied by the *Medical Record*, of New York, from its special report).

SECTION ON DENTAL AND ORAL SURGERY.

Jonathan Taft, M. D., of Cincinnati, O., President.

Secretaries—A. M. Dudley, M. D., of Salem, Mass; F. H. Rehwinkel, M. D., of Chillicothe, O.

MONDAY, SEPTEMBER 5TH—FIRST DAY—AFTERNOON SESSION.

The President welcomed those present.

Drs. I. V. Metnitz, of Austria; B. McLeod, of Scotland; and Greverts, of Holland, replied in behalf of the countries they represent.

The President then delivered his address, in which he reviewed the progress of dentistry in the last fifty years, and concluded by saying that although the past record was an excellent one, yet the goal is not yet reached. He urged the profession, through those present, to work in all earnest for a yet higher standard.

Dr. R. J. Porre, of Cincinnati, O., read a paper on

CHRONIC PYÆMIA FROM DENTAL ORIGIN.

The history of the case is as follows: The patient, male, good constitution and habits, suffered for the last thirty years from neuralgia, besides having constantly recurring furuncles

and eruptions in various parts of the body, which would often for months become running abscesses. He experienced burning and itching eruptions of hands and feet, which would finally change to stubborn ulcerations. His bowels were either stubbornly constipated or exhaustingly loose. He suffered from frequent rigors and febrile attacks of varying intensity, profuse night-sweats, retention of urine, serious constriction of the bowels and urethra. Lancinating pains darted from the maxilla of right side to bowels, bladder, limbs, hands and feet, or to whatever part was locally affected at the time. This latter peculiarity, together with the discovery of a little pus exuding from the locality of the wisdom-tooth, led to a final correct diagnosis of his case.

The tooth referred to was extracted, and a speedy and complete recovery followed. As other sources leading to pyæmia and having their starting-point in the oral cavity may be mentioned pyorrhœa alveolaris, alveolar abscess, abscess of the antrum, and dental caries.

The doctor related ten other cases similar to the above, which all yielded to the simple remedy of removing the offending tooth.

Dr. J. Frank Lydston, of Chicago, Ill., said that both physicians and dentists should appreciate the important relation which morbid conditions of the mouth and jaws, and especially those which may be produced by septic absorption, bear to different general conditions. Septic matter is quite generally found about the roots of teeth, and may, under favoring circumstances, be absorbed into the blood, and there produce disturbances of greater or less degree.

The paper was further discussed by Drs. Walker, of London, England; Barrett, of Buffalo, N. Y.; W. J. Younger, of San Francisco, Cal., and Chance, of Oregon.

TUESDAY, SEPTEMBER 6TH—SECOND DAY—MORNING SESSION

Dr. William Carr, New York, N. Y., gave a clinic on the

TREATMENT OF FRACTURES OF THE MAXILLÆ WITH MODIFIED
INTERDENTAL SPLINT.

The majority of fractures of the inferior maxilla occur in the body rarely at the symphysis menti, but usually directly anterior or posterior to the mental foramen. A noticeable fact in connection with these fractures is that the victim rarely applies for treatment for several days succeeding the injury. He realizes that some of his teeth are loosened and also that he is painfully bruised, but does not seek surgical aid until he becomes alarmed by the increased inflammatory condition of the parts. There is but little difficulty in establishing a correct diagnosis, as usually the following symptoms are present—great pain in the effort to open and close the mouth, swelling, crepitus, inflammation, inability to masticate, and marked irregularity of the teeth.

Treatment.—It is identical with that of other fractures, namely, to bring the parts into apposition and retain them firmly until ossification is completed. For treatment of fractures of the maxillæ there is nothing superior to the interdental splint. When properly adjusted, speedy union may be secured without deformity of the jaw or irregularity of the teeth. Before taking the impression a careful examination of the parts should be made. Loose teeth and spicula of bone should be removed, and the parts should then be brought as nearly as possible to their normal position. An accurate impression should be made with impression-compound or wax. The material used should be as warm as the patient can bear it, in order to prevent unnecessary pain and also to prevent further displacements of the parts. The splint is made of vulcanite and covers all the teeth of the lower jaw, and all the teeth posterior to the canine in the upper jaw—leaving a space of about three or four lines through which the patient may receive nourishment. Small holes are drilled in the splint over the grinding surface of each molar for the purpose of ascertaining whether its adjustment is proper.

The splint should first be adjusted to the sound jaw, then

gently bring the fractured jaw into position until it has passed about two-thirds of the length of the teeth—then with a quick, firm motion bring the parts into position. Next apply a four-tail bandage, which should be retained from three to five days; after this time, in the majority of cases, it may with safety be removed during the day, but should be replaced at night until the removal of the splint. The patient should be furnished with an ordinary rubber syringe, and instructed to keep the mouth thoroughly cleansed. For disinfectants I use peroxide of hydrogen three per cent. solution, or a solution of bisulphate of soda in the proportion of 5j to 3j, of water.

In ordinary cases the splint should be retained for three or four weeks, according to the physical condition of the patient—unless unforeseen complications should arise. The application of the splint, combined with thorough cleanliness, will usually be all the treatment required.

The advantages, besides those previously stated, are that the patient experiences but little pain and inconvenience, and can, as a rule, attend to his business almost immediately after the splint is applied.

It is not necessary that all the teeth, nor, indeed, that any should be present in the mouth in order to make this splint serve its purpose. In the first case the rubber can be made to take the place of the missing teeth, and in the latter case a perfect adaptation of the splint to the alveolar ridges can be secured, and will be found to keep the parts in perfect apposition.

Should it be deemed advisable to place a splint in position within an hour or two after seeing the case, one can be constructed entirely of ordinary gutta-percha, with just enough wire inside to stiffen it. Dr. Carr demonstrated this last method—it is very simple and can be made by any surgeon.

A number of gentlemen examined the principle and pronounced it very satisfactory in every way, the main points being its simplicity of construction, its effectiveness, and the ease with which it is adjusted and worn by the patient.

Dr. E. Brasseur, of Paris, France, read a paper on

THE USE OF AIR IN DENTAL THERAPEUTICS.

The reader urged that the ordinary means, such as bichloride and biniodide of mercury and carbolic-acid crystals, for destroying microbes in the oral cavity and, especially, in carious cavities of teeth, should be supplemented by the use of hot air.

Dr. C. A. Brackett, of Newport, R. I. discussed the paper at some length, laying considerable stress on the efficacy of crystallized carbolic acid as a germicide in carious cavities in teeth.

Other discussions followed, by Drs. James Truman and W. H. Morgan.

AFTERNOON SESSION.

Dr. Junius E. Cravens, of Indianapolis, Ind, read a paper on

THE MANAGEMENT OF PULPLESS TEETH.

This system is based on the proposition that a pulpless tooth, is not necessarily dead. The pulp being devitalized, the tooth still retains life through its pericementum. The usual course of treating pulpless teeth with escharotics and irritants cause irritation and final destruction of the pericementum, and the result is that the tooth, instead of being preserved will act as a foreign body, and will be thrown off by nature through abscesses; or, worse still will lead to no end of nervous derangements.

The treatment suggested by the reader is to thoroughly cleanse the pulp canal, and at once hermetically seal it with tin-foil.

The paper was discussed by Dr. Thomas Fillebrown, of Portland, Me. He did not agree with the essayist in the method outlined in the paper. The doctor gave a short synopsis of the method he employs in treating pulpless teeth, which, by the manner in which it was received by the Section, seemed to be the one generally pursued.

Dr. A. W. Harlan, of Chicago, Ill., followed, and likewise

objected to the views expressed by the essayist. A dead pulp produces no irritation in the canal; the disease which it causes is beyond. If you could mechanically displace an odor—which the speaker denied—and should then fill the root-canal without any disinfection, disaster would inevitably follow unless there should be a fistulous outlet.

Dr. W. C. Barrett, of Buffalo, N. Y., in discussing the paper, stated whether viewed from the standpoint of pathology or etymology the paper is alike remarkable. That such a mass of absurdities could be presented at a meeting of the world's representatives in dentistry is to me astounding, and I protest against its acceptance as the standard by which to judge the intelligence of American dentists. Why the exploded dogmas of twenty-five years since should be gravely and in all sincerity presented at such a meeting as this is, I must confess, something for which I was not prepared. The assertion that a closed chamber in which exist the septic debris and the products of decomposition of a tooth-pulp should not be opened and evacuated, I can scarcely believe is made in calm earnest. The essayist has exhibited his complete ignorance of the progress of the past century.

Modern antiseptic pathology has taught us certain facts, and among these is the knowledge that the first step in the treatment of septic cavities is complete drainage; second, disinfection and the removal of all the products of disorganization; third, destruction of septic organisms; and finally, the complete sealing of the cavity against further infection. These comprise the essential steps in the treatment of aseptic root-canals. I will not insult the intelligence of those present by presuming to enlarge upon this and by going into the details of treatment, for this is not a body of tyros. But I do object to a consideration of the subject from the low standpoint of this extraordinary paper.

Dr. T. E. Weeks, of Minneapolis, Minn., read a paper on

MATRICES AS ADJUNCTS IN FILLING TEETH.

The essayist reviewed the different appliances for simplifying

what would otherwise be very laborious operations. A perfect matrix should be simple in construction, cheap, easily adapted, and not too stiff, so that when applied it will yield just enough to allow sufficient gold to pass beyond the walls of the cavity for a good finish.

Dr. F. H. Guilford, of Philadelphia, Pa., in a few brief remarks, indorsed the sentiment expressed in the paper.

THIRD DAY, WEDNESDAY, SEPTEMBER 7TH—MORNING SESSION.

r. Pradère, of Lyons, France, read a paper on

PHTHISIS CURED BY THE CONTINUOUS APPLICATION OF MEDICINE TO THE PALATE.

Immediately after the paper was read, Dr. James Trueman, of Philadelphia, Pa., moved that it should not be accepted by the Section, but should be referred, without discussion, to Section I., in General Medicine; also embodying that the Executive Committee be censured for allowing such a paper to come before the Section. The motion was seconded by Frank Abbot, M. D., of New York, but the Chair ruled that, inasmuch as the Executive Committee had seen fit to admit this paper, it would be out of order to put the motion to the house. Dr. Trueman dissented from the decision of the Chair and renewed his motion. The question being then called, it was voted to refer the paper to Section I.

CLINIC.

A number of gentlemen gave clinics in the treatment of diseased conditions of the oral cavities, and others demonstrated their methods of filling teeth and constructing artificial dentures for patients. These clinics are spoken of as the most successful features in this Section, and it is but just to say that a good deal of credit is due to Dr. C. F. W. Boedecker, of New York, for the result.

Dr. Metnitz, of Vienna, Austria, read a paper on

OSTEOMYELITIS.

The main feature of the paper was the report of two cases from practice.

The history of the first case was as follows: In October, 1886, a lady, aged forty-three, had two teeth extracted. A few days later she suffered with chills, which were followed by slight mental disturbances. The seventh day the patient became unconscious, in which condition she was brought to the hospital. Examination revealed that there was a large swelling over the left cheek, extending to the temporal region; the skin covering this swelling was tense and pale in color; the sclerotic was highly colored (yellow), and the skin showed yellow tinge; the pupils were without reaction. The odor of the breath gave evidence of necrosis. The submaxillary glands were very much enlarged, and the neighboring tissues infiltrated. There was unconscious urination and defecation. Death occurred the following day. The post-mortem examination showed the membranes of the brain to be thickened and traversed by numerous vessels. The left hemisphere was covered by a layer of pus, and the right hemisphere showed considerable pus along the track of the vessels as well as several pus-depots. The brain-substance was quite soft. The examination of the oral cavity disclosed that of the two teeth extracted the upper alveolus had almost entirely filled up with healthy granulations, whereas the lower was filled with pus. The mucous membrane in the region of this diseased alveolus was very much discolored and could be easily removed in pieces. The probe discovered nothing but dead bone. All the muscles of the neck which are attached to the left side of the lower jaw were infiltrated with pus. The periosteum was separated from the left side of body and ramus of the jaw. The alveolus of the extracted wisdom-tooth communicated by two good-sized openings with the marrow cavity, and the marrow itself was discolored and infiltrated with fat. The cause of this extensive destructive action is no doubt to be looked for in the unclean condition of the alveolus after the extrac-

tion. Sections of the jaw show that the medullary canal was very much enlarged.

Kocher, Rosenbach and Busch, in experimenting on animals, have found that it is impossible to produce an acute pus-forming osteomyelitis either through traumatic injury or chemical and mechanical irritation, but that such a condition can readily be brought about by infecting the fresh wound in the bone by any decaying substance.

The second case was one of multiple osteomyelitis. The patient, male, aged seventeen, suffered from an attack of osteomyelitis of the humerus, the ulna, and the lower jaw. According to Billroth, it is not settled whether this condition (multiple osteomyelitis) is due to septic influences acting on various places at the same time, or whether the infection dates from one point.

Death in this case, as in the first, was directly due to acute suppurative meningitis. When we have to deal with a simple inflammation, energetic antiseptic treatment will prove quite sufficient. In severe cases of osteomyelitis Billroth advises that the seat of disease be reached as soon as possible—the pus evacuated, the cavity thoroughly disinfected, and dressed with antiseptic dressing. Many cases present no actual depots of pus, or abscesses, but simply an infiltration of the marrow. In such cases Billroth holds it of little value to open into the medullary canal. Neither does he advocate disarticulation or resection, because, in the first place, the exact extent of the disease cannot be foretold, and, secondly, the medullary substance of a patient suffering from osteomyelitis is in such a susceptible condition that a new injury would almost certainly prove fatal.

This paper was read by the essayist in German. No discussion followed.

Dr. Jenison, of Minneapolis, Minn., read a paper on

ART IN DENTISTRY.

The essayist advocated the restoration in gold of all teeth that

had been destroyed by caries, thereby improving both their usefulness and beauty.

In constructing artificial dentures more time should be given to the restoration of the features of the patient, and for that purpose single and not section teeth should be used.

Dr. John Allen, of New York, discussed the paper, taking up the main points to be observed in constructing an artificial denture. He closed his remarks by saying that inasmuch as the countenance reveals the thoughts of a person, great care should be exercised in restoring lost features.

THIRD DAY—AFTERNOON SESSION.

Dr. R. R. Andrews, of Cambridge, Mass., read a paper on

THE ORIGIN OF THE DENTAL FIBRIL, ILLUSTRATED BY AID OF
STEREOPTICON.

Dr. Andrews described his process of preparing and mounting the specimens for the microscope, which differed in no essential respect from the latest methods employed by others for that purpose.

In speaking of the formation of the fibrils, the essayist says there are two kinds of odontoblasts—those which are square toward the dentine, and others, just by the sides of the first-mentioned, which are pear-shaped. From these latter, and not from the first (or square end ones), originate the dental fibril.

The stereopticon views presented by the doctor showed very clearly with what patience, earnestness, and intelligence the essayist worked to establish his view of the question. And the hearty appreciation accorded him by the Section was well merited.

Dr. Frank Abbott, of New York, in opening the discussion, paid a high tribute to the reader of the paper for the hard work done in behalf of his specialty. In order to understand the process by which the dental fibril is produced, it is neces-

sary for us to consider the matter from the third to the fifth month of intra-uterine life, at which period of the existence of the foetus the papillae of teeth are so far developed that a material change is observed to be taking place. The papilla is a mass of myxometous tissue, liberally supplied with medullary elements. In some instances at three months, at others as late as the fifth of intra-uterine life, a coalescing of several of the medullary corpuscles into one may be observed upon the periphery of the papilla adjacent to the enamel organ, which at this period may be observed forming a cap upon the papilla. The united medullary corpuscles are known as odontoblasts. The impression has generally prevailed among histologists and embryologists, that the odontoblasts were directly formed into dentine. This theory, through recent researches, has been proven to be incorrect. The odontoblasts, when viewed with a power of 1,200, show a delicate reticulum, which unites the nuclei with the walls of each corpuscle and with each other. This reticulum, as well as the walls of the odontoblasts, are the living matter which remains as the living portion of the dentine. Before the beginning of the deposition of lime salts, the odontoblasts are reconverted into medullary substance. As such they receive the calcareous basis-substance, and thus a certain territory of the papilla becomes dentine. While this process of calcification is going on, another row of odontoblasts makes its appearance, from the sides and ends of which prolongations of the living matter may be seen running into the canaliculi of the dentine already formed. A spindle- or pear-shaped odontoblast gives off one, while those with broad ends give off two, three, and even five, prolongations. If the views advanced in the paper were correct, it would necessarily follow that territories of considerable size would be left in the dentine with no canaliculi whatever; nor is there any provision for furnishing these territories with any living tissue.

Dr. Fletcher, of Cincinnati, O., read a paper on

PROTECTIVE DENTINE; ILLUSTRATED BY STEREOPTICON.

This paper was listened to with great interest by the Sec-

tion. The slides which were shown on the screen showed the different kinds of protective dentine, and the essayist gave his views of how these different efforts on the part of nature to protect herself are brought about.

Dr. W. X. Sudduth, of Philadelphia, agreed with the essayist in the practical conclusions drawn; he supplemented the reader's remarks by stating that the odontoblasts remain after the development of the dentine, but can be stimulated to produce or perform their function of forming protective dentine.

Dr. W. H. Atkinson, of New York, complimented the gentlemen on producing such well-digested papers.

Dr. J. Howard Mummery, of London, England, exhibited

PHOTO-MICROGRAPHS OF ALL THE STRUCTURES OF THE TOOTH,
and explained the best method of producing them.

THURSDAY, SEPTEMBER 8TH—FOURTH DAY—MORNING SESSION.

MICROSCOPY.

Professor Frank Abbott, of New York, and Dr. R. R. Andrews, of Cambridge, Mass., were in charge of this department. Every facility was afforded the members of this Section to acquaint themselves with dental microscopy, both physiological and pathological. Among the ground specimens shown by Professor Abbott were those of carious teeth, congenital pathological enamel, hyperostosis (osteomas) of the roots of teeth, and deposits of secondary dentine. Dr. Andrews exhibited serial slides of the developing teeth, and the development of the dental fibril. About forty negatives from his photomicrograph were especially interesting and valuable.

CLINICS.

About thirty gentlemen gave clinics in filling teeth with gold, pivoting teeth, constructing artificial dentures, and treat-

ing (surgically) diseased conditions of the gums. It would require too much space to enumerate all the gentlemen who acquitted themselves in such a creditable manner.

C. L. Goddard, A. M., D. D. S., of San Francisco, Cal., read a paper entitled

PAIN IN THE TEMPORO-MAXILLARY JOINT CAUSED BY IRREGULARITY OF THE TEETH.

Patient, thirty years old, experienced pain in temporo-maxillary joint during mastication, which was caused by straining the muscles and ligaments, owing to masticating with the jaw protruded. When the teeth were brought together, as in the act of eating, the incisors alone touched, and the bicuspid and the molars were about one-eighth of an inch apart. The treatment employed consisted in spreading the upper teeth and thereby securing a proper articulation.

Dr. E. S. Chisholm, of Tuscaloosa, Ala., read a paper entitled.

THE INFLUENCE OF WEATHER CHANGES ON THE HUMAN ORGANISM.

After carefully noting the influence exerted by temperature, humidity, and electricity, the author concludes that by far the greatest power over human organism is exerted by atmospheric pressure. In support of this theory he submits two arguments. The normal atmospheric weight on man is 14.7 pounds to the square inch at the sea level. The body is sustained by an equal power of resistance, wisely provided. If the pressure be less, the surface of the body will be distended, and the superficial circulation less restrained. This change can be brought about by exposure to great altitude, as well as by natural physical causes, when the circulation will be disturbed just the same. Any undue pressure on a portion of the body may then be felt. May not this disturbance of tension on soft tissues which are fixed to the bony framework of man, or where disease has a seat in periosteal and ligamentous

attachments, be liable to greater inflammation? Or when a nerve of a tooth, which in a state of health is inclosed in a bony chamber (which has no expansive liberties, nor needs them as long as health continues), becomes exposed through a small aperture; when the normal atmospheric balance is lowered, the nerve has a tendency to be drawn through the aperture and takes on inflammation, probably followed by congestion and complete devitalization.

A report from the Pennsylvania Hospital, some years ago, on the observation of barometric pressure in surgical operations, shows that in 259 operations the barometer was ascending in 102, descending in 123, and standing in 34. Fifty-four of the whole number were fatal, 11 having been operated on with barometer ascending, 25 when descending, and 8 when standing.

AFTERNOON SESSION.

The Section was honored by a visit from the President of the Congress, Dr. N. S. Davis. In introducing him President J. Taft recounted the efforts that had been put forth by Dr. Davis to secure recognition to the Dental Section. To him more than to any other man in the medical profession is due the credit for having removed the obstructions in the way of the dental specialty.

Dr. Davis replied: Twenty-two years ago I had the pleasure of entertaining the members of the American Dental Association, then assembled at Chicago, at my house. On that occasion I expressed the hope that some day, in the near future, we might meet on equal grounds. My hopes of that day are realized to-day. At the last meeting of the American Medical Association, when the question was brought up to admit dentists holding their degree from a recognized institution, it met with no opposition. The action of that body has forever removed the obstacle which had been in your way, and you are now on an equal footing with your medical brethren. He congratulated the members for the interest

they took in the advancement of the henliag art, and closed by warning them not to fall into "schools," but to meet everyone on the broad field of science.

Dr. E. S. Talbot, of Chicago, Ill., read a paper on

ETIOLOGY OF IRREGULARITIES OF THE JAWS AND TEETH.

This paper was very exhaustive and thoroughly well prepared. The writer showed throughout an intimate acquaintance with the subject, and the Section was not lacking in appreciation of his efforts;

This paper was discussed by Dr. W. C. Barrett, of Buffalo, N. Y.

A paper by Dr. J. J. R. Patrick, Belleville, Ill., on "Irregularities," was read by title; also one by Dr. E. H. Angle, Minneapolis, Minn., entitled "Notes on Othodontia, with a New System of Regulation and Retention;" also by Dr. L. C. Ingersoll, Keokuk, Ia., on "Inflammation of the Oral Tissues."

FRIDAY, SEPTEMBER 9TH—FIFTH DAY—MORNING SESSION.

CLINICS

A very Interesting clinic was given by Dr. A. R. Starr, of New York, in capping the exposed pulp of a tooth.

It is only of late years that any progress has been made in treating and protecting an exposed tooth pulp so as to preserve its vitality. The operation caused the patient very little pain, and all those who have had the opportunity to see it agreed that it was a success.

Dr. William J. Younger, of San Francisco, implanted a tooth. Great diversity of opinion was expressed as to the ultimate result of this method of supplying lost teeth.

Dr. R. B. Adair, of Gainesville, Gr., completed the treatment of a case of pyorrhœa alveolaris.

Thirty-two other gentlemen gave clinics on filling teeth and constructing artificial dentures.

Professor F. Busch, of Berlin, Germany, read a paper on

THE COMPARATIVE PATHOLOGY OF THE TEETH, WITH SPECIAL
REFERENCE TO THE TUSK OF THE ELEPHANT.

A number of specimens were shown by the doctor to illustrate his paper. At its close he exhibited an instrument for removing the small birth-marks so often found on the face. The instruments have a circular cutting edge ranging in size from one-fourth to half an inch in diameter, and fit into the dental engine. The mode of operation consists in selecting a knife the size of the mark to be removed, placing it upon the spot, and quickly revolving it. It will take only a moment to accomplish this, and the operation is said to be almost painless. The only dressing the doctor applies is dry cotton, which he leaves in position for from six to eight days, at the end of which time the part is perfectly healed.

Discussion of the paper was taken part in by Drs. Wm. H. Atkinson, of New York, and W. C. Barrett, of Buffalo, N. Y.

Dr. E. Andrieu. Paris, France, read a paper on

THE SIXTH-YEAR MOLAR.

The essayist held that the sixth-year molar being in development, eruption, and structure an organ of transmission from the temporary to the permanent set, it should be extracted when the permanent teeth are in position. More room is gained by this procedure, and a longer period of usefulness insured to those remaining.

Dr. L. D. Sheperd, of Boston, Mass., expressed his regret that such sentiments should still be prevailing among the profession. He cited cases from practice where the extraction of these teeth caused not alone loss of valuable masticating surface, but actual irregularity of the ones remaining.

Dr. Paul Dubois, of Paris, France, stated that he wished the Section to note that the ideas expressed in the paper were not carried out by the dentists in France.

Professor Frank Abbott, of New York, could see no difference in structure between the sixth-year molar and the other

permanent teeth under the microscope, but a very marked difference was apparent between that and the temporary teeth.

A paper by Dr. Th. David, of Paris, France, on "Aphthous Stomatitis," was read by title.

Dr. J. S. Marshall, of Chicago, Ill., read a paper on

OPERATION FOR THE CURE OF A PERSISTENT NEURALGIA OF
BOTH TEMPORO-MAXILLARY ARTICULATIONS, AND REFLECTED
PAIN IN THE RIGHT BRACHIAL PLEXUS.

History.—Patient, female, forty-two years of age, was operated on some eight years before for the removal of an osteosarcoma of the right inferior maxilla. Extensive suppuration followed, and the wound did not heal for several months. Considerable cicatricial tissue was formed, and the jaw displaced to a considerable extent. Neuralgia dated from the healing of the wound, and the conclusion arrived at was that the irregular position of the jaw was the cause. An operation for the relief of this condition was performed, and the neuralgia ceased. The doctor described the steps of the operation at great length, but failed to show that it differed from methods generally employed.

The following papers were read by title: "Articulation of Artificial Teeth," by Dr. H. L. Cruttenden, of Northfield, Minn.; "Power in Dentistry," by W. St. George Elliot, M. D., of London, England; "Porcelain Filling," by Dr. E. C. Moore, of Detroit, Mich.

Dr. Alton H. Thompson, of Topeka, Kan., read a paper entitled

DOES FUNCTION CONTROL THE EVOLUTION OF STRUCTURE?

Some time since, Dr. C. N. Pierce discussed a subject similar to that at the head of this paper. After noticing the mechanical forces involved in and influencing the evolution of the teeth, he says: "Those cumulative forces are utilized through heredity, and, while so potent in tooth-evolution, exert a similar in-

fluence in the development and modification of all other structures and organs. All departments of biology recognize the fact that heredity, adaptation, and growth, being of special importance in the evolution of the organic body, must therefore be regarded as especially formative functions. Adaptation to environment might be called the ancestor of function, as function is of organization. Illustrations of modification of structure in response to function are very numerous in which it is shown how an organ may be completely changed or a mere rudiment be fully developed by the demand for the performance of a function unknown before."

A century ago Lamarck laid down the following laws concerning the development of organic life, which we, with all our accumulated facts, can change but little. In his second law he said that, The production of a new organ in an animal body results from the supervention of a new want continuing to make itself felt, and a new movement which this want gives birth to and encourages. Third law: The development of organs and their force of action are constantly in ratio to the employment of those organs. Fourth law: All that has been acquired, laid down, or changed in the organization of the individual, in the course of this life, is commenced by generation and transmitted to new individuals which proceed from those which have undergone those changes. Altered wants lead to altered habits, which result in the formation of new organs, as well as in the modification and growth of those previously existing.

In our study of the subject we will confine our observations to that field in which we, as dental and oral specialists, are most interested—the teeth.

Everything is made for a purpose, and the purpose must precede the thing made for effecting the purpose. Nature plans her work as deliberately as man plans his actions. The means for accomplishing an end are not the cause of execution, but the effect. The organ is the effect, and function is the cause of structure. As food-selection is the cause of the function, so the function of the acquisition and preparation of food is thus the cause of the masticating apparatus.

If function is the cause and support of structure, if an organ develops or atrophies as it is used or disused, if the impulse of active employment dictates the evolution of parts and tissues in succeeding generations, if organs have been suppressed through disuse or remain in various forms as mere rudiments—their function having passed away—then, indeed, must the teeth of man be tending toward final and inevitable suppression.

If in the future of physical education there shall be found a place for education in the accomplishment of masticating food, then, indeed, may the teeth be improved and developed by exercise, as the muscles and lungs are improved and developed.

Owing to the time for adjournment having arrived, no discussion was had on this paper.

The President congratulated the members on the interest they had shown throughout the session, and hoped great good might come from this Congress, both to the profession and their patients.

A vote of thanks was offered to President N. S. Davis for the exertions he put forth in behalf of the dental section.

A vote of thanks was offered to President J. Taft and the Executive Committee.

M. C. GOTTSCHALDT, D. D. S., New York.

BRITISH DENTAL ASSOCIATION.

ANNUAL MEETING IN GLASGOW.

The annual general meeting of the British Dental Association was opened August 18th, in the hall of the Faculty of Physicians and Surgeons, St. Vincent Street, Glasgow. Sir Edwin Saunders, F. R. C. S., occupied the chair. There was a large attendance of members of the Association.

The Chairman, in opening the proceedings, intimated the resignation of Sir John Tomes from the position of president of the Representative Board of the association. He was afraid

that they must accept the resignation as final. Sir John had been induced last year to withdraw his resignation for a time, but his inability to attend the meetings had, as he explained, rendered him unable to hold out a prospect of any longer being president. At the same time he was quite ready on all occasions to give the association his valuable advice, which they would esteem in all cases of difficulty, because no man perhaps was better able to advise when any questions of difficulty arose, from his long observation and experience of everything connected with the institution, and from the singleness of purpose with which he had at all times devoted himself to the interests of the association. The Chairman then moved—"That the meeting accept with great reluctance the resignation of Sir John Tomes as president of the Representative Board of the British Dental Association, and desires to record its deep sense of the value of his services in the cause of dental reform and professional organization, and especially of his vigilance during a long period of impending legislation in medical matters, which has resulted in securing a full recognition and place for dental surgery in the recent and probably final Medical Amendment Act of 1886.

Mr. Smith Turner, London, seconded the resolution, which was cordially adopted.

It was afterwards agreed that the vacancy caused by the retirement of Sir John Tomes should be filled by the appointment of Mr. Smith Turner, who had hitherto acted as Vice-President; and Mr. Felix Neiss, London, was appointed Vice President, in room of Mr. Smith Turner.

ANNUAL REPORTS.

Mr. F. Canton, London, honorary treasurer *pro tem.*, submitted his report; in which it was stated that the balance in bank at the credit of the association amounted to £589 16s 2d.

Mr. Morton Small, London, Secretary, stated that Ireland had asked to be affiliated with the parent society—a movement due to the enery of Dr. Sack, of Dublin. Numerically the

membership of the association had improved, the total number now on the roll being 645, showing an increase of 38 over last year. There had been only one resignation as against six last year, and two deaths, the same number last year.

NEXT MEETING.

It was agreed that the next meeting should be held in Dublin on the 23d, 24th and 25th of August, 1888.

ELECTION OF OFFICE-BEARERS.

Mr. Daniel Corbett, Dublin, was elected president-elect of the association; and Mr. F. Canton, London, was appointed treasurer in room of Mr. James Parkinson, who had been obliged to resign on account of ill-health.

VALEDICTORY ADDRESS.

Sir Edwin Saunders, in his valedictory address, said the question of greatest moment to them was what had been the effect of the past year's operations of the association; what was the record of its work, and to what extent had it fulfilled its purpose. Had it satisfied or fallen short of the expectations of the profession in whose interests it was established? He could not help thinking that the reports to which they had listened gave a very satisfactory answer to these questions. This phenomenal year, which had witnessed an unparalleled outburst of patriotism and loyalty—this jubilee year—when they were alternately filled with amazement at the fervor of attachment of all classes and conditions to the personality of our Sovereign, and at the benignity of nature in the unwonted affluence of sunshine with which our beloved fatherland had been favored—would be remembered by the members of the association as having been signalized by the formation of the Irish branch. This gratifying event, the consummation of which was greatly due to the prompt action of Mr. Smith Turner, vice-chairman of the Representative Board, whose

energy and unselfish devotion to duty had been displayed on many similar occasions, would, he felt sure, be regarded as a matter of sincere congratulation by the association, at once as an undoubted accession of strength not only by the augmented number of members, but by the social position of the gentleman by whom their profession had been so well represented in the sister isle. The president went on to say that the two great engines for raising the dental profession were an educated public opinion and organized instruction in dental science; and these were working steadily and surely for this end. If they looked back only some twenty years they could not fail to be struck with the real and substantial advance which had been made not only in the development and resources of the art, but in the social and educational status of those now entering its ranks. And it was in this direction that would be found the true and efficient means of at once freeing it from opprobrium and purging it from the contamination of the unworthy.

On the motion of Dr. John Smith, Edinburgh, seconded by Mr. Charles S. Tomes, London, the retiring president was awarded a vote of thanks.

Mr. J. R. Brownlie, president, then took the chair. In his opening address he said it was his pleasing duty to welcome the British Dental Association to Glasgow—to a city having associated with it memories which they must all be disposed to cherish, and memories, too which, save for the lessons they taught, they could now afford to forget. He would remind them that they were now on what should be classic ground, in a neighborhood possessing a special interest from having been the scene of the first essay in life of the man who had been fitly described as the father of the dental profession. In the near neighborhood John Hunter was born, and in Glasgow he worked as a tradesman during his earlier years, before devoting himself to more congenial work, and in which he so distinguished himself. It was pleasant, he continued, to note the interest taken in them, the youngest relative, by the medical profession, as they saw it in the action of its representative

institutions. Ancient seats of learning were interested in their progress, and medical schools were competing for the privilege of educating their youth.

The licenses in dental surgery were growing in number and in public appreciation. He knew not if it was the company Parliament decreed they should keep which had stimulated so many to take advantage of the *sine curriculo* provisions, but he knew that in this neighborhood the possession of the license in dental surgery was increased from one within ten years anterior to the passing of the Act to 50 per cent. within ten years thereafter.

Amongst the most important results of legislation they must give a very prominent place to the British Dental Association. Formed to give effect to the spirit and the provisions of the Dentist Act, it was yearly drawing closer professional ties. It was bringing together those who might not otherwise have met, and under conditions which could not fail to promote the art and the interests of the dentist. But it would be to misrepresent the situation to make it appear that they had as yet great occasion to rest and be thankful. A first attempt at legislation would necessarily leave room for improvement. Already certain alterations had been effected with advantage, and it might be expected that from time to time opportunities would present themselves for further adjustment of the provisions of the Act.

Of medical titles at home and dental titles abroad there was no lack, and so long as they were legitimately acquired and used the additional information and experience they represented must prove a gain to their possessor, and to the credit of the profession of which he was a member. But the medalion had its obverse. The most coveted distinctions had been imitated. They had not now to complain so much of absolutely base metal as of the extent to which it was alloyed. Surely two out of so many dental diplomas granted in America was too small a proportion to be found deserving a place on their dental register. Probably they ought now to congratulate themselves that the issue of really counterfeit diplomas was at

an end. In that respect some improvement had been effected. It was over a dozen years since they had in Glasgow an agency for the sale of bogus diplomas—since he was favored with a visit by the accredited agent of one of these so-called American colleges, having full authority to examine *in absentia*, and to grant any or as many titles as might be wanted. This man's agency extended to granting the degree of doctor in divinity, medicine, dentistry, and some others, and the charge was moderate, considering the outlay usually entailed in the acquisition of such honors. So flagrant an abuse could not long survive. This "college" was suppressed, and it did not appear that such honors were now to be had on the like easy terms.

They had, however, something still to hope for at the hands of their Transatlantic brethren. They were still left to contend with the varying value of the American dental diplomas, nor could they be content that the title conferred should acquire by contraction a fictitious value, that it should have one meaning in America and a different meaning here.

In conclusion, he said their association had assumed a most comprehensive title, and it had yet to make good its claim to it. The name included as a legitimate field of the association observations in the whole of an empire on which the sun never sets. Were they to understand the term British as employed in its limited or its widest sense? His answer to that was that their sphere of action had been limited, and they might still increase within this limited sphere. But this could not be accomplished until they had taken possession of the wider area; and not till the association was represented by branches wherever dentists were in numbers sufficient to combine for the purpose could they claim to be, in the fullest acceptation of the term, the "British Dental Association."

PAPERS.

Mr. Morton Small read a paper which had been contributed by Mr. Walter Campbell, Dundee, on "The Water Pressure

to be Obtained in all Towns in Great Britain and Ireland of Above 10,000 Inhabitants, with Remarks in Reference to the Use of the Hastie Motor in Workrooms and Surgeries." After some conversation it was agreed to postpone discussion of the paper till the following day, when the engine would be seen in operation at the Dental Hospital.

Mr. James Cummings, Glasgow, gave a demonstration of his new method of "Continuous Gum Work with any Form and Make of Tooth." Although they had, he said, made great strides of late in both surgical and mechanical dentistry, there seemed to be yet room for improvement. It was to what he thought was an improvement in a process in the latter branch of their profession that he would call their attention. Most of them had seen, and some had tried, the Verrier process of producing continuous gum facings. Probably all would admit that there was considerable difficulty and uncertainty in producing a satisfactory piece of work of this kind by the present process. First of all, a particular kind of tooth must be used; secondly, when the work was finished there was considerable warpage, sometimes entirely spoiling articulation; thirdly, the teeth get fused and made unsightly on the surface from being exposed to the great heat required to fuse the gum-facing; and, fourthly, there was the tendency of the facing to crack even when the piece was being worn in the mouth, and without any apparent cause. The improvements he had been working out would certainly do away with the first three defects mentioned, and, to a great extent, if not entirely, with the fourth. Mr. Cumming then proceeded to give details of his process, and specimens of his work were passed round for inspection. An interesting discussion followed, and Mr. Cumming was awarded the thanks of the meeting.

Mr. Gordon Jones contributed a paper "On a More Efficient Method of Conferring Dental Appointments."

Dr. George Cunningham, Harvard, read a paper "On the Mechanical Training of the Dental Student." His principal contention was that the whole of the time of the dental pupil should not be exclusively passed in the dental laboratory, but

that where suitable institutions existed a tangible part of each day, or even of alternate days, should be spent in attendance at some practical and allied courses of manual technology, or in a practical school of mechanics. The conditions and the actual courses followed must vary according to the various opportunities afforded in the different parts of the kingdom. Mr. Morton Small, he said, held that a practical examination in the mechanical department should form a part of the ordeal to be passed before the student obtained his coveted diploma. He trusted the association would cordially support such a proposition, as thereby it would be the sooner carried into force. That proposition, however, seemed to him only a very strong reason why the dental student should be furnished with an opportunity of remedying the possible defects and deficiencies of his private pupilage by the optional and public course of one year in a dental hospital school. Some such arrangement as he had just indicated would combine the advantages of the school system with that of the present form of pupilage, and certainly would do much to promote the efficiency of L.D.S. diploma, which, after all, must be the essential qualification for a thorough dental practitioner.

A long discussion followed the reading of Dr. Cunningham's paper, and thereafter the meeting adjourned.

The president and Mrs. Brownlie held a reception of the members of the association and their friends in St. Andrew's Hall in the evening.

[TO BE CONTINUED.]

OHIO STATE DENTAL SOCIETY.

The next annual meeting of the Ohio State Dental Society will be held in Springfield on Wednesday, October 25, and continue three days.

J. R. CALLAHAN, Sec.

EDITORIAL.

THE NINTH INTERNATIONAL MEDICAL CONGRESS.

This great gathering of which so much was expected from a scientific standpoint, and over which so much controversy and ill feeling was engendered during the time of its preliminary organization, has just closed one of the most interesting and profitable sessions, both scientifically and socially, in its history. Good sense and fraternal feeling reigned throughout. All piques and personalities were buried in the past, and each vied with the other to see who could do most to make the Congress a success and worthy of the profession of the United States of America.

Our foreign guests expressed themselves as being highly pleased with our country, with their reception by the profession and with the work of the Congress.

The Congress was called to order by the President of the United States in a few well chosen words, and Prof. Nathan S. Davis, M.D., LL.D., was formally elected president of the Congress. Dr. John Hamilton, Surgeon-General of the Marine Hospital Service, was elected secretary general, and a long list of distinguished gentlemen from abroad and from our own country were elected as vice-presidents. Officers of sections were next read and elected. Secretary of State, Bayard, welcomed the foreign guests to America in the name of the government and the people, in a very finely written address, and which was greatly appreciated.

Responses from several foreign gentlemen were then made all of whom except the representatives from Russia and Italy spoke in their native tongues.

The president-elect then read his inaugural address, which was an historical review of modern medicine, the causes of its rapid progress and the benefits of associated effort.

The attendance upon the Congress was very large, about 3,000 being registered, a goodly number of whom were from abroad. Nearly every nation on the globe was represented, and when the circumstance of distance and the dread of ocean travel is considered, we have every reason to feel gratified at the numbers present.

China, Japan, Turkey, Russia, Germany, Italy, France, England, Scotland, Ireland, Norway, Sweden and several of the minor countries of Europe were represented, most of them officially.

The Chinese representative was from the peculiarity and gorgeousness of his attire the observed of the observed.

The Japanese representative was a surgeon in the Royal Navy, and a very intelligent young man. His government has given him a six years leave of absence in which to perfect his studies in Western medicine. He will spend two years in the Jefferson Medical College, two years in the Edinburgh Medical School and two years in the Berlin Medical School, and all expenses are paid by his government.

The various sections were all well attended and the statement was made to us by several of the Presidents of Sections that they had more papers presented than could be read; many had to be read by title only.

With regard to the character of the papers presented these same gentlemen expressed themselves as "greatly pleased," and that the work would compare favorably with that which was presented at Copenhagen or London.

The Section on Dental and Oral Surgery was among the largest of the Congress and it was estimated that at least 600 were in attendance upon its meetings. The largest number present at any one session was 330.

President Taft made an admirable presiding officer and Secretaries Rehwinkel and Dudley were indefatigable in the performance of their many and laborious duties. The thanks of

the section and the profession are due to them for the manner in which they have performed their duties.

The work done by this section was simply immense. The papers presented in most cases were of high order and showed a great amount of careful and laborious research and experimentation. A few were presented which, for the honor of the section, had better been left out.

The clinics held at the Franklin School Building were a marked feature in the work of the section, and elicited a great amount of comment and interest from the gentlemen engaged in the other specialties of medicine.

From thirty to fifty gentlemen gave clinics upon different departments of operative and prosthetic dentistry every morning from 8 to 11 o'clock, and the rooms were generally crowded all the time, in fact it was difficult sometimes to get them to lay down the practical demonstration in order to listen to and discuss the papers presented.

The general impression among the members of the Congress in regard to the dentists was that they were enthusiasts and scientific enthusiasts at that.

Dr. Younger's clinics for the implantation of teeth were visited by numbers of our medical brethren and were frequently the topic of discussion at the dinner table, the general verdict being that the connection with the jaw could be only by encystment and that their successful retention could be for only a very brief period, at best. Time only, however, will positively settle this question.

In our next issue we shall have something to say about the papers read and the discussions upon them.

Among the bright things said and done at the Congress was a little incident which occurred in the registration hall on Sunday morning. Dr. H. and Lady, of Yorkshire, England, were together in the hall while the doctor was making out his papers. On presenting his certificate to Dr. Arnold, the treasurer, he was presented with the badge of the Congress—which, by the way, was very pretty. Mrs. H. was much pleased with its beauty and asked Dr. Arnold if she could

not have one. He replied that "she might if she had the degree." She instantly replied, "I have, sir, my degree is M.-A.-M.-A." The by-standers and Dr. Arnold were convulsed with laughter and all admitted that Mrs. H. was entitled to a badge of the Congress.

J. S. M.

EDUCATING THE PUBLIC.

Dental Societies have of late years been doing toward the progress of Dental Science, and now that we are greatly advanced in fact much beyond the public's appreciation and instead of spending so much time on the acid and germ theory, would it not be well to devote more time than has been heretofore given toward educating the public up to the importance of taking proper care of the teeth, how to find a skilled dentist and to avoid the botch, the necessity of having only good work done, the economy gained not in money alone, but in the saving of tooth structure. It is wonderful to note the great amount of ignorance displayed among the people in regard to their teeth. When, a mother calls with her child ten years old to have an aching tooth extracted, we look in the mouth and find that it is one of the six-year-molars. We explain to her that it is one of the child's permanent molars and should be saved, at which explanation she is much surprised, and says she did not know a child ten years old had any permanent teeth except the front teeth, we make a further examination, and find all the first molars, in a bad condition.

Again a person calls to have some teeth filled and requests you to kill the nerve (pulp). You ask why. The patient says so it will never ache. They are much surprised when you tell them that it is more liable to ache when the pulp is destroyed than when it is alive and healthy. Then another time, a man comes in with his wife. She, suffering very much, wants a tooth extracted. We look at her teeth and tell her that they have been sadly neglected, and that she should have them put in a good healthy condition. The husband, then says, why look at me,

I never had the toothache, and have never had a brush on my teeth during my life. Instead of being ashamed to tell the dentist, that he is so filthy, he is proud of it.

A number of such instances happen to all of us daily, and what are we to do about it. Patients won't read our pamphlets or circulars, that we give them, they won't pay much attention; to our advice, but they will read advertisements of quack dentists, and before we are aware of it, we find they have been to the quack to have their operations performed, thinking they had better work, and cheaper than a good operator could give them; and when they come to look into the matter further they find that they have paid the quack more money for bad work than would have been charged by a skilled dentist; but the trouble is here: that, while the patient, does not return to them again he does not denounce them to his friends as he should, and the quack gets new suckers all the time, until finally the suckers have got on to him in that locality and then he moves on to a new field, with his pockets well filled, leaving his patients behind to mourn over his departure.

We find all over the country quacks, with their large signs swinging to the breeze. Some of them, read thus: *Teeth at \$10 a set. Filling at half the usual price.* Teeth filled without pain, by the use of the electric machine. Drs. Smith and Jones, *Painless Dentists.* And others too numerous to mention. Signs such as the above attract not only ignorant people but persons of considerable intellect. Oh, to think of the great wrongs the people are having imposed upon them every day. Something must be done. We as dentists, have not taken any steps towards defending the public against the quacks. We know this great wrong has been going on for years, and it is our duty to suppress them; we should not stand idly by and permit it to go on, when in our power to prevent it. Let this great question be agitated with earnestness, and in a few short years quacks will be a thing of the past.

PITTWOOD.

MOLECULES.

Dr. C. L. Hungerford in the *Western Dental Journal* in an editorial criticism of a misquoted statement that Dr. C. C. Carroll should have made in one of his recent clinical lectures relating to molecular motion induced by electrical action in certain aluminum alloys, says "If aluminum is an element as chemistry teaches, it is not composed of molecules."

This would seem to be a discovery of Dr. Hungerford's that is so novel as to entitle him to letters patent for it, if it were true, but unfortunately for the discoverer of this "mare's nest" molecules are supposed to have a place in all the sixty odd elements as yet discovered.

If Dr. H. will consult almost any common school text book of chemistry such as Barker's College Chemistry, page 7, he will find some interesting and instructive reading on the subject of elemental molecules, and may be reminded of the adage "that a little learning is a dangerous thing, etc.

KEYSTONE.

THE FIRST DISTRICT DENTAL SOCIETY OF THE
STATE OF NEW YORK.

Early in the coming January the above society proposes to hold its nineteenth anniversary.

To those who have attended previous meetings, under the auspices of the First District, it is hardly necessary to say that it will, in all probability, be a profitable and pleasant gathering. Every opportunity will be afforded those who attend to see and hear dentistry from a scientific standpoint.

We are creditably informed that the officers are now endeavoring to eclipse their former efforts.

For further information see journals for November and December.

W.

CORRESPONDENCE.

INTERNATIONAL CONGRESS.

PATERSON, N. J., Sept. 22, 1887.

DEAR ARCHIVES:—

Was the Dental Section of the Ninth International Medical Congress a success? Perhaps so.—It all depends upon what each observer would set up as his standard of success. Judged from the standpoint of numbers in attendance, it was a decided success. The interest displayed in the work of the Section was gratifying, the meeting rooms and accommodations excellent, the weather, all that could be desired; the work itself was rather mixed in character; while some of the papers were good, in fact creditable, a good many were very poor, considering the meeting they were prepared for—an International Congress—composed of the brightest men in the profession from all quarters of the globe. They did not come from great distances to hear long and tiresome essays that might possibly have been considered “up to the times” twenty or thirty years ago, nor yet to listen to elementary productions that would more properly have been in place before a first course class of students. It certainly is very tiresome for men who have been students for years and who may properly be accorded eminence in a profession to be compelled to listen to the worn and well-tried details of common practice when they have come to hear principles discussed.

At such a meeting one would very naturally expect that the character of the work would be above the ordinary level, but as a matter of fact some of the papers would have been given but scant attention in a fairly prosperous local society. Another deplorable feature was the unseemly bickering as to

priority of inventions; some gentlemen being sensitive lest their "thunder" should be stolen by others. President Taft acted with rare good judgment and discretion, and manifested a desire to keep the discussions and work in their legitimate channels and was fairly successful in doing so. If our profession is scientific, as is claimed, its work must of necessity be based upon "principles," and if the principle underlying any given line of operations is thoroughly understood, it would seem reasonable to suppose that men would arrive at a certain result by nearly the same methods.

This thought is brought out by a discussion which occurred over the paper presented by Dr. Brasseun, of France, on "The use of air in dental therapeutics." During the discussion one gentleman well-known and of high position in the profession, minutely described an elaborate apparatus in his office that he used for obtaining a steady and reliable blast of hot air, claiming that by its use he could obtund sensitive dentine to such a degree as to be able to excavate cavities, in very sensitive teeth in an almost painless manner. Other gentlemen followed in nearly the same strain, claiming that absolute dryness was the thing necessary to obviate the usual pains and tortures of excavating, finally another gentleman who also holds an enviable position in the profession and whose name is known from ocean to ocean, took the floor and boldly declared that in his practice when working upon sensitive dentine his assistant stood by the chair, and with a drop tube or syringe kept the cavity constantly full of tepid water; saturation being in his opinion the thing as an obtunder. Surely somebody must be wrong, there is a lack of knowledge of principles somewhere. I will not undertake to say which of the gentlemen was in error, but it must be patent to every one that somebody was wrong. I hardly think an International Congress a proper place for such a display as that, but others may think differently.

It may be possible to effectually dislodge and drive out of the canaliculi of a pulpless tooth, the mephitic gases and microbes there present, by the use of a broach and shred of dry

cotton, and render the tooth aseptic without the use of medicaments. The author of a certain paper, read at the meeting may be able to do that very thing as often as he claimed he could, but he did not succeed in convincing any considerable number of gentlemen present, that it was good and justifiable practice.

There were many good papers read, and some of the discussions were very instructive as well as interesting, but on the whole, that portion of the section's work was not what it should have been, possibly the reason for it may be traced to the door of the committee whose duty it was to receive and pass upon the papers before the Congress met.

The clinics were a grand success, they were the striking features of the meeting, and brought out strongly the well-known fact that American dentists are practical. Almost everything in the range of operative dentistry as it is practiced to-day was demonstrated, from the extraction of a tooth down to the latest "fad"—implantation. Mechanical dentistry was not forgotten and some well-known exponents of that branch were present to exhibit their "pets."

Taken all in all the amount of work done by the Section was prodigious and it will take a long time to sift it all out, examine it, fix the average and accord to the Dental Section its proper place in the Section-list of the Ninth International Congress.

LUCKEY.

DESTROYING THE PULP.

ST. LOUIS MO., Sept. 28, 1887.

EDITOR ARCHIVES.—In *Caulk's Dental Annual* for January 1887. Dr. A. H. Fuller under the above heading remarks that, "the practice of destroying the pulp of a tooth in order to relieve the patient from tooth-ache caused by its exposure, and thus prevent the necessity for the extraction of the tooth, and in a measure preserve its usefulness, dates well back into the *Eighteenth Century*." He then refers to John Hunter's work.

"Treatise on the Natural History and Diseases of the Human Teeth" 1771 and 1778 and and Joseph Fox in 1803 and 1806. In a translation of Ambrose Paré's work of the sixteenth century which was published in London in 1678. He says, "so in the most grievous pains of rotten teeth, the thrusting of an hot iron into their roots, or stopping them with cotton dipped in Oyl of Vitrol, or *Aqua vitea*, gives most certain ease, for by burning the nerve which is inserted into their roots, the sense, and so consequently the pain, is taken away." Thus it will be seen that Ambrose Paré two hundred years prior to John Hunter and Joseph Fox practiced and recorded exactly the same treatment for destroying the pulp for relieving an aching tooth without extraction. H. L. McKELLOPS M. D., D. D. S.

MONTHLY LIST OF PATENTS

For inventions relating to dentistry, bearing date September 25, 1887, reported expressly for this journal by Louis Bagger & Co., mechanical experts and solicitors of patents, Washington, D. C. Advice free.

369,114, dental apparatus, M. H. Knapp, Jackson, Mich.; 368,948, electro-magnetic dental mallet and plugger, P. Helmer, Clinton, Ia.; 369,701, Dental matrix, T. B. Fletcher, Portage, Wis.; 367,300, Dental chair, H. H. Keith, St. Louis, Mo.; 367,211, dental grinding-disk and holder, J. A. Kimball, New York; 367,108, dental instrument, J. R. Kelley, J. W. Kelly and S. A. Steinberger, Augusta, Ill.; 368,072, Pneumatic dental plugger, W. S. Sherman and W. K. Moore, Marinette, Wis.; 367,401, fastening for dental flasks, F. G. Hughes, Galt, Ontario, Can.; 368,154, dental engine bracket, W. A. Knowles, Alameda, Cal.; 368,042, dental matrix, W. A. Woodward, New York; 368,187, dental engine, A. W. Browne, Westfield, N. Y.; 368,457, dental mandrel and disk, D. W. Clark, Dodgeville, Wis.; 368,492, dental plate, Albert Robinson, Grand Rapids, Mich.; 368,179, dental plugger, Frank Abbott, New York; 368,458, dental plugger, Norman Clark. Sterling, Ill.

DIED.

At Monroe, Wis., September 11, 1887, of typhoid fever, Dr. J. S. Reynolds.

Dr. Reynolds was one of the most active, progressive dentists in the State. A member of the State Board of Dental Examiners, one of our correspondents, and socially a favorite in every circle where he was known.

SHELLAC is an excellent cement, answering the many requirements the dentist has for such an article and when made into sticks is a very convenient form to handle. To prepare these sticks place the shellac in boiling water which softens it, then roll between two pieces of board to the desired size.

G. A. M.

TREATMENT OF TOOTHACHE DUE TO DENTAL CARIES.—Dr. Popoff, writing in the *Russkaya Meditsina*, states that he has succeeded in relieving toothache caused by caries of the teeth by making the patient rinse the mouth every half-hour with a dessert-spoonful of a 20% solution of permanganate of potash, taking care to hold the liquid in the mouth for some minutes. .

DELICACY OF THE SENSE OF SMELL IN MAN.—The extreme delicacy of the sense of smell in man has been shown by a series of interesting experiments by Messrs. Fischer and Penzoldt. In an empty room of some two hundred and thirty cubic metres capacity and tightly closed, a small quantity of the particular substance to be detected was thoroughly mixed with the air, and the observer then admitted. Among the different substances which were tested in this manner, it was found that the very smallest amount recognizable was 0.1 of a milligram of mercaptan. This quantity diffused through the room sufficed to make its distinctive character appreciable in the small volume of air coming in contact with the nerves of the nose, from which it was estimated that the 1-460,000,000 part of a milligram of this substance was recognizable—an infinitesimal quantity, passing conception, but which science declares to be a fact.—*Ex.*

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MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various Antiseptics in the treatment of Diseases of the Oral Cavity, by W. D. Miller, A. B., Ph. D., D. D. S., Prof. of Operative and Clinical Dentistry, University of Berlin, from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

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To the Dental Profession.

GENTLEMEN:

After having practiced Dentistry for fourteen years I determined in 1866 to make a Specialty of Dentifrices, with a view of producing an article which should not only be acceptable to the general public, but also be approved and indorsed by the Dental Profession.

In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

They will be found in all the leading stores where such goods are sold, and where Dentists can recommend their patients to call for them. This obviates the necessity of Dentists keeping such preparations, which has proved by experience to be generally unprofitable. I should be pleased to forward a sample of my TABLETS or POWDER to any Dentist, free of expense, on receipt of a postal card giving address, that all may have an opportunity to test its merits. I am,

Respectfully yours,

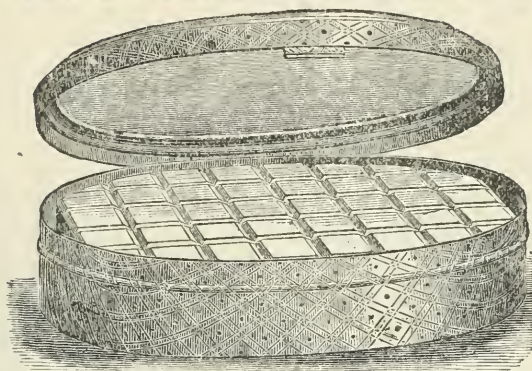
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88 MAIDEN LANE, NEW YORK.

New York, March 1, 1884.

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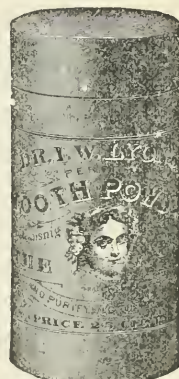
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DENTAL SPECIALTIES

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Cocained, Hydronaphtholated, Borated, Salicylated, Carbolated, Styptic, or of any desired medication. These goods, made from long fibre, are thoroughly carded, full weight, *perfect* in quality, snow white, highly absorbent, and being free from oil, grease, acids or alkali, are entirely neutral and superior in every way to anything that has ever been offered to the profession. A careful comparison of our Absorbent Cottons with those of other manufacturers will not only confirm what we have just stated, but will show furthermore that our Cottons are free from short and broken fibre or "dustings," so characteristic of low priced Cottons found in the markets.

OUR DENTAL ABSORBENT LINT

is manufactured with the greatest possible care and skill, by improved and perfected machinery, of which *we are the sole owners and operators in this country*, and our product is guaranteed to be more absorbent, fluffier, whiter, smoother, *softer and lighter* than any other in the market. Many Dentists now employ our lint for protecting patients' clothing, wiping instruments, etc., in place of napkins, as formerly used, as it absorbs all blood, pus, mucus, saliva and other extraneous matters, thereby securing cleanliness and freedom from odor for both patient and operator. The low price at which our lint is supplied adds to its popularity for the purposes just enumerated.

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strength, purity, smoothness, elasticity and freedom from grit, wood, or other foreign matter.

We would also call particular attention to

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the new antiseptic and disinfectant of the phenol series of coal tar products, now so popular with the medical and dental professions. In germicidal power it is second only to *mercuric bi-chloride* and being *non-poisonous, non-corrosive and harmless*, it is preferred to that well known agent. Its freedom from odor and taste, added to the fact that it is twelve times as strong, recommended it over carbolic acid, while it is three times as potent as salicylic acid. As it is anæsthetic and soothing in its local effects, it is especially recommended for treating sensitive dental cavities, abscesses, etc. Hydronaphthol can be obtained in the form of scale-like crystals, or incorporated in our Absorbent Cotton, Bandages, Lute, or any desired dental or surgical dressing that can be rendered antiseptic. Order our goods [carefully specifying N. & J.] from dealers in Dental or Medical and Surgical supplies, or directly from us. A book fully descriptive of Hydronaphthol sent free on application.

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The Faculty would especially recommend that all first-course students attend this and the spring course.

THE REGULAR WINTER OR SESSION will begin Monday, October 3, 1887, and continue until the fourth Wednesday in February, 1888, with a short recess at Christmas.

THE SPRING SESSION begins the first Monday after the close of the Winter Session, and ends the 28th of April. The work of this session is entirely practical; no lectures are delivered.

The lectures and clinical instruction in the Infirmary and Laboratory will fully occupy the students' time, to which they should be prepared to devote their undivided attention from the beginning of the session.

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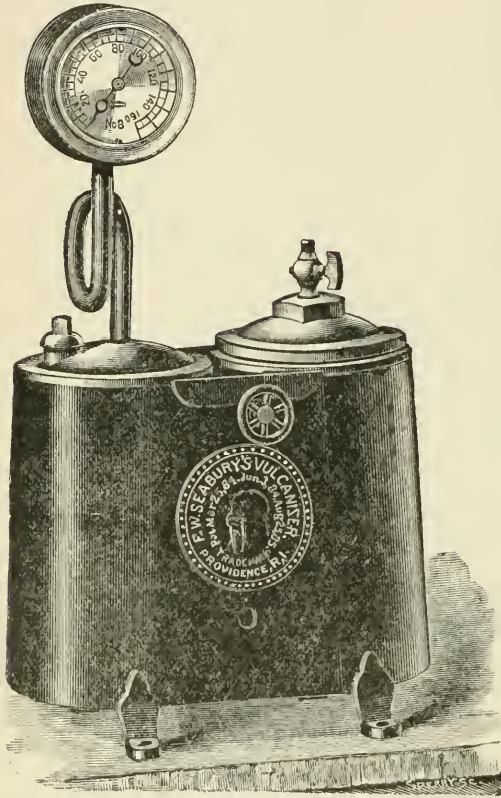
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THE Archives of Dentistry.

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VOL. IV., No. 11.] NOVEMBER, 1887. [NEW SERIES.

ORIGINAL ARTICLES.

CERTAINLY IT IS EXCELLENT DISCIPLINE FOR AN AUTHOR TO FEEL THAT HE MUST SAY ALL HE HAS TO SAY IN THE FEWEST POSSIBLE WORDS, OR HIS READER IS SURE TO SKIP THEM; AND IN THE PLAINEST POSSIBLE WORDS, OR HIS READER WILL CERTAINLY MISUNDERSTAND THEM. GENERALLY, ALSO, A DOWNRIGHT FACT MAY BE TOLD IN A PLAIN WAY; AND WE WANT DOWNRIGHT FACTS AT PRESENT MORE THAN ANYTHING ELSE.—*Ruskin*.

FOOTPRINTS OF A PROFESSION OR ETHICS IN MATERIALS AND MEDICINES.¹

BY HORATIO C. MERIAM, D.M.D., SALEM, MASS.

"Dentistry is a Specialty of Medicine."

This rendering of the claim in our code of ethics has perhaps received more attention than any other one sentence. It is not strange that this should be strongly held to, but strange rather that it should be debated by dentists. Why they more than oculists or aurists? The answer is to be found, I fear, in the fact that we have taken, or many think that the position of a specialist is reached and held by education, and education alone.

¹Address delivered before the Maine Dental Society at Waterville, July 19, 1887.

My object to-night is to call attention to methods and materials, and see if there are not other things as well as education, or the title of M.D. to be thought of. And if others find

"Tongues in trees,
Books in the running brooks,
Sermons in stones,
And good in everything,"

let me illustrate a principle with a plugger, enforce an ethic with an excavator, and find in the methods and materials of our profession the weak spot which is the cause of the uncertain position.

In the Church of Rome the boys who are to be trained for the priesthood are set apart at the age of twelve. For, says a high authority, "the child must preach, the youth must preach, that the man may preach." So also of us. If we are to be specialists in medicine, we must not only be educated as specialists, but work daily as specialists. Accepting all the laws and obligations that belong to medicine, then we shall have the rank and influence of specialists. "There are, of course, in every calling, those who go about the work of the day before them, doing it according to the rules of their craft, and asking no questions of the past or of the future, or of the aim and end to which their special labor is contributing. These often consider and call themselves practical men. They pull the oars of society, and have no leisure to watch the currents running this or that way; let theorists and philosophers attend to them. In the mean time, however, these currents are carrying the practical men, too, and all their work may be thrown away, and worse than thrown away, if they do not take knowledge of them and get out of the wrong ones and into the right ones as soon as they may. Sir Edward Parry and his party were going straight towards the pole in one of their arctic expeditions, traveling at the rate of ten miles a day; but the ice over which they traveled was drifting straight towards the equator, at the rate of twelve miles a day, and yet no man among them would have known that he was traveling

two miles a day backward unless he had lifted his eyes from the track in which he was plodding. It is not only going backward that the plain practical workman is liable to, if he will not look up and look around; he may go forward to ends he little dreams of.

It is a simple business for a mason to build up a niche in a wall; but what if a hundred years afterwards when the wall is torn down, the skeleton of a murdered man drop out of the niche? It was a plain practical piece of carpentry for a Jewish artisan to fit two pieces of timber together according to the legal pattern in the time of Pontius Pilate. He asked no questions, perhaps, but we know what burden the cross bore on the morrow.

And so with subtler tools than trowels or axes, the statesman who works in policy without principle, the theologian who works in forms without a soul, the physician, who calling himself a practical man, refuses to recognize the larger laws which govern his changing practice may all find that they have been building truth into the wall, and hanging humanity upon the cross."¹

The vast amount of our material and the range of our methods make the dentist inventive and ingenious. But are they not calculated, unless balanced by a high professional standard and controlled by ethics, which with us may be defined as "that which relates to our actions to each other and to our profession, their motives and tendencies," to *unmake* him as a professional brother, mar the pleasant association that should exist between honorable gentlemen, carry him into the rank of trade and thus prevent his ranking with the other specialists of medicine?

We have no reason to criticize "dental depots." They were the delight of student days, and even now many can exclaim as did Goldsmith of his muse

"Thou source of all my bliss, and all my woe,
That found'st me poor at first and keep'st me so."

¹O. W. Holmes in "Currents and Counter-currents in Medical Science."

But they serve as a means to mark our standing as specialists. A stream cannot rise higher than its source. And as the "depots" are fed by the profession they show at once our comparative ranking with medicine. As we are specialists in medicine they should be to us what the apothecary and the maker of surgical instruments are to the physician and surgeon, the oculist or the aurist. Let us examine and see if it is so. The makers referred to are not permitted to control supplies and through this the profession. We hear that a large house has acquired control of all patents on the dental engine, and are thus at liberty to manufacture such only as they may wish, and place its own judgment instead of the profession's.

Not long since I was informed that a dental chair, the invention of a dentist, had been bought and withheld from the profession. I heard within a few months of a hand-piece that a manufacturer had bought for five years, and had thus for that time prevented its coming into competition with those of his own make.

A short time ago I was told of a dentist who took to a manufacturer a form of tooth he had invented. The manufacturer looked at it, then opened a drawer and showed by drawings that he already had the invention in his possession.

Many of our journals are published and controlled by dealers, and often contain articles in the text advertising materials for sale by their publishers. We often see recommended or offered for sale to the profession articles and medicines, the formulas of which are not given.

One of our dental societies in New York holds its meetings in the dental depots of certain dealers. I have heard that at its last meeting it refused permission to another firm to exhibit before it, saying "that they had granted to the first mentioned dealer the exclusive right to exhibit before them, and those they had invited from all parts of the country," the firm thus completing the capture of this society body and science. Our dealers have also formed a combination and propose to decide who shall conduct our supply business, whose gold they shall sell you, whose materials they will or will

not keep, through what firms you shall order their goods, and they able to take orders for only such goods as they choose to offer. They may have the power to interfere with the delivery of an instrument you have ordered if it infringes on a patent held by them.

Now I have looked on these questions with care, and I can not see but that they are perfectly right in all that they do, or have done, if dentistry is a trade and we are tooth-carpenters. But if dentistry is a branch of medicine and we its practitioners, they our druggists and instrument makers, then it is wrong from the foundation up. But we are its foundation. If the depots grind we turn the wheel and feed the the grist. We have surrendered to them the right to select for us and now complain because they exercise it. The brother who sells his invention instead of bringing it before his society or the society which allows him to do so, are the ones to blame; not the dealer who buys it and shelves it if to his advantage. Surgical instrument makers would soon learn to do this if the medical profession would permit. Was the manufacturer to blame who bought the hand-piece for five years and withheld it to protect those he had in the market, or the professional brother who sold it? What would be thought of a Cheever or a Hodges or any leading surgeon who would do such a thing? Yet it would be right if medicine were a trade and they repairers of the clavicle and menders of femurs.

Perhaps Metcalf & Co., or Billings & Clapp, or any other large chemists or druggists would be delighted to provide rooms for the Massachusetts Medical Society, but do you think that they would ever dare to go to that society or that that society would listen to such a proposition? Do you think that a New York medical society would grant to a maker of surgical instruments the exclusive right to exhibit before them and their guests, like the exclusive right to sell soda water at a mechanical fair? Yet this would be right for the representative of any trade. What would be thought of Dr. Bigelow, and how would his name go down in the history of medicine if he had asked or received from his brothers a roy-

alty for each time they had performed his operation for stone, or sold his instruments so that they could be withdrawn from competing with those already in the market? Or even patented and received a revenue on their sale? Would a dealer venture to approach such a man with a proposition to buy his instruments so as to control their sale? Yet these things are looked on as legitimate and proper in trade, but they are condemned in medicine for the reason that methods honorable in trade may yet be discreditable in a liberal profession.

No, gentlemen! I am convinced that we are all in the same boat. The principle is the same with the brother who sells his patent and the Sheffield or the Rubber Company who buys. We object to being squeezed, but will sell an invention by which men may squeeze our brother, and complain that they have thus acquired the power to squeeze.

In all the feeling aroused by the recent litigation, has there been a complaint against the man who sold his invention to the Tooth Crown Company and thus gave the profession into their power, if sustained? The Tooth Crown Company is a logical successor of the Dental Vulcanite Company. And so it must go on, company after company, until the profession insists that its members conduct themselves as members of a liberal profession in fact as in name.

If a physician can patent a new instrument, medicine or method, thus making it his property (for patent means "exclusive right or privilege") he certainly has a right to sell it or charge for its use by others. If others have instruments, medicines or methods which conflict with his, he certainly has the right to buy those and combine with his own, or withdraw them altogether if he chooses, they being his property.

There also goes with this the right to bring before the people so as to create a demand for it, and also to protect himself and property in the court in the usual way. But he has no right to do this and at the same time profess to be filled with holy zeal for humanity and brotherly love, and claim the right to associate with others who lead the lives of honorable physicians and gentlemen. I hope I have made this point clear.

I hoped when I began to be able to put some sting into this paper. I hope that there is some one here whose years of labor have not cooled the love of his profession or quenched the enthusiasm of his youth, and that he will hold to his ideal, though hundreds deny its possibility. So let us look at the "ideal society" and the "ideal members:" the ideal members will produce in time the ideal society.

A society should be simply a committee of the whole, of which to be a member is simply to be one of a brotherhood whose motto shall be truth. The study of each should not be, first, what can I get from it, but what can I bring to it. He will realize that his needs are also his brother's and will feel ashamed in withholding aught that he knows or learns that will help that other in his work for man. The society will have for him the first claim on all he can bring to the profession by hand or brain. The manufacturers may take it up after. They will in time learn that they must make what the profession wish, not what they may want to make. The society will recognize that the relation in which they stand to the community that trusts them, requires that they should investigate all new inventions, materials and methods, and see that they are brought before them for such investigation. This will secure to every man the right to have his productions so treated, and prevention or attempt at prevention of such investigation or improvement from any source be realized as an attempt to swerve from honor and duty. In thus presenting them we and not the manufacturers are made the judges of their merits, and suppression would be rendered impossible. He will maintain the professional position of a patron of dealers, not a dependent.

The ideal member as one of a liberal profession will realize that his highest honor comes through the faithfulness with which he serves mankind through his profession, and that the highest honor of a manufacturer or dealer will be found in the faithfulness with he aids him, and that no research, discovery or invention that he may make, will be treated so as to reverse their position. He will assume that all the world desires to

aid him as he aids it, and feel at liberty to call for such aid wherever it can be found. His position will prevent his keeping others, by patent, from engaging in any work or service for their profession or the world. For to do this would make the claims of his profession, to science (to know), to liberality, or philanthropy a pretence, and thus powerless. "Pretence," says Emerson, "never wrote an Iliad, nor drove back Xerxes, nor Christianized the world, nor abolished slavery." He will hold to his right, know the origin, nature and formula of all his materials and medicines, and it will be a simple thing for him to decline to recommend articles and methods patented in his profession or materials and medicines of which the formulas have not been given.

I cannot see the justice of such men as Dr. Black, or our own Andrews, working on year after year in faithful earnest work, a work that they can best do, a work that can never be repaid by the profession, while another may see elsewhere a mechanical contrivance, apply it to dentistry, then sell to a dealer for thousands. For the work of each is but the work or thought or idea for their profession. And why should the one whose work must be wrought by research and investigation be placed at the mercy of him who works his out with a file in brass or steel. Nay, even should he wish to improve an appliance, the privilege may be denied him by the fact that it has been covered by a patent taken out by the false brother.

Some time since one of our profession said that he read the advertising pages of our journals first, and did not doubt but that others did so, if they would own it. I believe this.

But, gentlemen, it shows that our new materials come to us through these pages and through the dealers and not from the profession through the meetings of societies like this, and the reading pages of our journals as they should.

To sell an invention so that it is withheld from the profession should be a matter for impeachment as well as the more vulgar offence of parading one's virtues in the public prints. For to do so is to deny all the claims of professional brotherhood and society obligations.

The late Dr. Parmlee, of New York, had a frequent visitor in a man to whom he had freely given of ideas and methods that he himself had secured through years of labor and study. One day this man said, "A man from the country was in my office the other day and I taught him the method you showed me, and I made him pay pretty well for it too." The grand old gentleman turned on him thus: "Is that the way you have been treated in this office? Be gone!"

Do you think that Dr. Parmlee should have charged in the first place or demanded a royalty for every time the man made use of the idea?

We should object to the principle of special privileges and patents from the fact that it degrades our profession to a trade as if we were here "but for the dollars," rather than object when one squeezes too hard. The patenting or secret atmosphere is foul and will not produce honorable gentlemen practicing dentistry.

A member of our profession cannot do with honors that which is a disgrace to a physician, nor can we, if we permit it, receive honor from the community, nor our schools receive that position and endowment that is so freely given to institutions that rest on liberal foundations, including charity, science and philosophy, unless we place ourselves in line with the physician and surgeon and show equal zeal in maintaining our profession, strong in truth and fair in honor. The profession should take a position that will make future Sheffields and Richmonds impossible.

Patenting dentists married to patenting dealers will surely produce "Tooth Crown" and "Rubber Companies" as offspring. To expect otherwise is as absurd as to bring together the acid and the alkali and complain of the effervescence.

I long for a "dental library and reading room" in every large city where we may meet and in brotherly love continue, where we can, by clubbing together, have made any new thing that we may desire; with all scientific magazines and periodicals, with journals and catalogues of the arts and trades and a register and directory of good workmen; where new

things may be placed on exhibition, for at least a fortnight, for the inspection of dentists, and where no one may become a member who does not come as a brother in truth as well as in name.

Some may think that these are positions too strong for our profession to take, but they are only such as are called for by our claims to be specialists in medicine and members of a liberal profession. Though it may matter little to the public that we are what we wish to be thought, it should, however; always matter to ourselves.

"If it is recognized that dentists are amenable to those rules that ordinarily govern the medical profession, then the logical consequence is that dentists cannot expect to be recognized as part of the medical profession."

The American Medical Association has recently opened its doors to members of the dental profession who are in good standing. We shall be members with a "bar sinister" if the stain of patents and secrecy is allowed to rest on our methods and materials.

I quote first from the "Code of Ethics of the American Medical Association."

"Of the Duties of Physicians to Each Other and to the Profession at Large."

"ARTICLE I.—Duties for the support of professional character."

SECTION 5.—Equally derogatory to professional character is it for a physician to hold a patent for any surgical instrument or medicine; or to dispense a secret *nostrum*, whether it be the composition or exclusive property of himself or of others. For if such *nostrum* be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and if mystery alone give it value and importance, such craft implies either disgraceful ignorance or fraudulent avarice. It is also reprehensible for physicians to give certificates attesting the efficacy of patent or secret medicines or in any way to promote the use of them."

Has the American Dental Association a voice on these questions?

The reader is asked to withhold credit or criticisms of Dr. Meriam's paper till the argument is completed in our next issue.—[ED.]

[TO BE CONTINUED.]

ALUMINIUM.

BY H. L. M'KELLOPS, M.D., D.D.S., ST. LOUIS, MO.

The ancients held that all material substances could be resolved into four undecomposable bodies, viz., air, earth, fire and water. As for earth, one of the elements of the ancients, we all know that it consists of a variety of earths, each of which has been shown by the discoveries of chemists to be the oxide of a metal. The main constituent of one of these earths is alumina, the oxide of the metal aluminium. Aluminium in one form or another is distributed in the utmost profusion throughout the whole composition of the globe. There probably is no other metal which is so abundant or which plays a more important part in the world's economy, not in its metallic form but in combination with other substances.

Until within the last three-quarters of a century the existence of such a metal was not known, and to Sir Humphry Davy is the knowledge of the earthy metals due, many of them having been discovered by him, and though he did not produce aluminium from alumina it was ultimately obtained by others working on the discoveries which he had initiated. In 1854 M. Deville, who was liberally supplied with funds by the Emperor of the French to carry out researches for the production of aluminium, succeeded in producing sodium in large quantities, and at a price which was sufficiently low to enable it to be employed in the production of aluminium. Until this time the production was in small quantities, the result of laboratory experiments only. Previous to the researches and labors of M. Deville the price of the metal aluminium was such

as to render its production a simple curiosity for the scientific and its employment in the arts was absolutely out of the question. In 1856, two years after his discovery, his labors had caused a reduction in price to £3 per oz.

The first reference made to the metal aluminum in the dental periodicals appears in the *American Journal of Dental Science*, Vol. IV, No. 2, new series, April, 1856, the article being on a "new and advantageous mode of preparing the metal, by Prof. H. Rose," which was translated and read before the National Institute, Washington, D. C., October 5, 1855. The first number of the *British Journal of Dental Science*, Vol. I, 1856 (July), is the first reference I have been able to find where mention is made of its probable use in dentistry, which is as follows: "It will be at once seen that special readers of this journal are particularly interested in following the progress of this newly introduced metal, and in experimenting upon its capabilities whenever it shall be put in their hands in a state of purity sufficient for the purposes of dentistry. It is now a question whether this time has actually arrived."

The price at this time was £1.5s an oz. In the second volume of the Transactions of the Odontological Society of London, June 7, 1858, Mr. F. G. Harrington made the following communication "On a Mode of Casting Beds and Palates for Artificial Teeth in the New Metal Aluminum."

After stating that the new metal is the basis of common clay, he said, "Like gold, aluminum possesses the property of resisting the action of all such acids as are likely to come into contact with it in the mouth." In addition to which he exhibited a piece which he had worn in his mouth night and day for six months without its having undergone the least apparent change. These tests had fully satisfied him that it could be placed in the mouth with the most perfect confidence respecting its durability, freedom from taste, and everything offensive. He goes on to state that a number of dentists have attempted to use aluminum by soldering pieces of it together on the principle of gold work, but had failed because no suitable solder had thus far been discovered. By his plan a piece could be

made of any form, size or thickness that would be required by the mouth without solder being used in any manner. He used flat mineral teeth, and his improvements consisted, first, in making them with only one piece of platina; and, secondly, in taking the strain during mastication off the platina by applying an aluminum support at the base of each tooth. A perfect fit would be insured, which had never before been attained either in gold or bone; cleanliness would be preserved, because there would be no cavities in which food could lodge, and added to these advantages the teeth would combine lightness, firmness and durability, at less expense, greater certainty of arrangement and fit, with simplicity of construction. This is probably the first case recorded of casting the metal aluminum as a base for artificial teeth. In the first number of Vol. I of the *Dental Review* (London), 1859, Mr. Harrington writes under date of February 11, 1859, "I have now been wearing a piece of aluminum constantly night and day, since the middle of December, 1857—fourteen months—without any perceivable alteration; thus I have every confidence in its durability; but its perfect tastelessness, harmlessness, and extreme metallic lightness are its great recommendations for dental purposes." In this same letter he also states: "Those dentists who have tried aluminum as a basis for artificial teeth have failed, because they have confined themselves to use wrought aluminum, which, as I have before stated, will not stand the action of the saliva of the mouth upon it, whereas cast aluminum will stand; and it is only in consequence of my having used cast instead of wrought aluminum, that I have been successful in bringing it into use for dental purposes."

The editor of the *American Journal of Dental Science*, second series, Vol. VII, No. 2, (April) 1857, A. S. Peggott, M.D., states "that as the price of the production is now so reduced that it may be expected soon to be seen in commerce, and its lightness and unalterability under common influences, appear to recommend it to dentists, he gives the profession the principal facts connected with its manufacture, etc.

For the next four years there does not seem to have been

anything written in regard to the use of aluminum in dentistry. The next article appearing in 1861 in the *Dental Register*, Vol. XV, No. 9, giving the process of its manufacture in England by Prof. Deville's process.

The *Dental Cosmos*, Vol. VIII, No. 7, (February) 1867, publishes the proceedings of the Maryland Association of Dentists, November 30, 1866, in which, nine years after Mr. F. G. Harrington had cast an aluminum base for artificial teeth and given his process to the profession before the London Odontological Society and which fact was recorded in their transactions, as I have before stated, the following appears: "Dr. J. B. Bean exhibited a specimen of *cast* aluminum plate, which was examined with interest, its adaptability as a base for artificial teeth being confidently claimed by the author of the specimen. The association congratulated Dr. Bean upon his success in casting so perfectly aluminum plates, and wished a record made of the fact, that this is the first successful effort known to the association in casting aluminum as a base for artificial teeth."

In the same volume of the *Cosmos*, No. 9, April, 1867, Dr. Bean states, "My apparatus for casting the metal was completed in September, 1866, and the piece exhibited to the Dental Society of the State of Maryland on the 30th November last, was among my first attempts, but since that time I have made many valuable improvements, and the principles of the process as now developed are all that can be desired, and only remain to be perfected in their more minute details. The discovery of the process itself has cost much study and research, together with many expensive and laborious experiments, developing several patentable principles, yet I shall not patent any portion of it, nor suffer it to be done by anyone (unless a prior inventor) if I can prevent it and I ask the profession to sustain me."

In the May No. of the *American Journ. of Dental Science*, Vol. I, No. 1, 1867, Dr. Bean says, "he succeeded in casting a plate in 1860, but was unable to produce a plate with uncracked teeth until last November, and the prodigious shrinkage of the

metal was not overcome so as to make a perfect fit to the mouth, until within the last two or three months."

In an article published in the *Cosmos*, Vol. X, No. 7, (July) 1868, Dr. S. Lawrence, in an article on "Aluminum as Compared with Other Materials for Dental Plates," states that Dr. Bean has patented three rights in the making of cast aluminum plates, "first on making allowance for shrinkage of the metal when cast; second, on apparatus for casting, and, third, on fastening the teeth to the plate." He then says that, to work according to Dr. Bean's patent, a plate is very nicely produced, and is pretty sure to fit the mouth. But there is much of the process which occupies so much time that, if this is the only way it can be worked it will be a long time before it can be brought into general use." "It requires more skill than vulcanite, and indifference in manipulation shows its marks very plainly. Much of the process patented by Dr. Bean is entirely useless. I would say that aluminum may be worked as easily as ordinary keoplastics with one or two exceptions," his process being as follows: He takes the impression in the ordinary way in plaster; coat this evenly with collodion; then oil; mix plaster and common sea sand, about equal parts, in bulk, add a little pulverized pumice stone, and pour into the impression, shaking well down. You now have the male model and the one upon which you are to cast. A wax or gutta-percha trial plate is fitted to this. Take the articulation, fit up the teeth same as for vulcanite, only do not let the wax go over the edge of the gum, unless it is thick, as there is liability to break the teeth in the shrinkage.

But for single or plain teeth, fit them the same as for rubber or ordinary keoplastic. Then, having the case ready to bed, have a flask with two apertures on the top at the back. Then bed using the same material as in the male cast; then dry and heat gradually to a red heat; insert tubes from four to six inches long into the apertures, and pour quickly until the metal rises in the opposite tube and you have finished.

The addition of a little carbonate of soda while melting will make it pour sharper.

In the *Cosmos*, Vol. XI, No. 3, 1869, in an article on aluminum by Geo. O. Starr, he says: "Another thing which is apt to make this metal more valuable is its use in dentistry. Not long ago Dr. J. Bean obtained a patent for cast aluminum plates for artificial teeth. This, however, is a very difficult and expensive process, requiring great care and time. Since then Dr. A. Starr, of New York, has received two patents for aluminum solders for uniting it to other metals and itself. By his valuable discovery it can be worked in dentistry as easily as gold or silver and in much less time. There can be no doubt of its value in dentistry combining as it does tastelessness, low specific gravity, tenacity and durability."

The *Dental Times*, Vol. X, No. 2, Oct., 1872, has an article, which is quite extensive on "Aluminum Base," by C. Sauer, Berlin, which was read before the Association of German Dentists held in Vienna, 1872, from which I make the following extracts:

"The process I will give you proves that whatever can be made with rubber can also be made with aluminum.

"The process of working aluminum very much resembles that of rubber. I make my castings upon the original model and at the same time by the casting bind the metal to the teeth. The principal labor in putting up an aluminum piece is the casting; to accomplish this perfectly I must strictly regard the melting point of the metal; the temperature of the material composing the cast model, as well as the teeth, must approach that of the melting point of the aluminum. The filling of the flask must shrink as little as possible and plaster with substances containing gravel and pumice stone stand even at a high temperature. Clay has, by its composition, so near a relation to aluminum that it can, for this reason, be used as a filling for the flask. Its resistance to high temperatures is an important consideration. For the same reason I consider graphite to be valuable, but as the graphite contains carbon it is liable to enter into combination with different

gases during the time subjected to the glowing heat and they are injurious to the aluminum, oxygen being one of these.

The composition as I use it consists of:

Plaster	-	-	-	-	-	1 part.
Pomice	-	-	-	-	-	$\frac{1}{2}$ part.
Clay	-	-	-	-	-	$\frac{1}{6}$ part.
Graphite	-	-	-	-	-	$\frac{1}{6}$ part.

This seems to me to answer the best purpose. It contracts very little in the glowing heat and casting, and becomes, in the heated composition, very fine and tender.

The flask is of the same cylindrical shape as for rubber work. It consists of four pieces, two of them are cylinders of different heights and open at both sides with two covers. The difference between these and rubber flasks consists in a hole in the side wall the higher cylinder for the mould and a tube placed upon the hole for moulding.

The covers of the flask have on two sides opposite each other joined pieces, somewhat resembling a tuning fork.

These joined pieces must stand exactly opposite to each other when the flask is closed.

These being for two screws to bring together the covers of the flask. The screws end on each side with a button, the latter runs in a box. The button and box afford resistance when the different parts of the flask are brought together. The lower cylinder serves for the reception of the model, and has always on the under side a ledge. The higher cylinder gives position to the piece. The filling tube which is placed to one side is split its whole length, the upper and under parts being put together by a screw. The screw at the same time serves to secure the filling tube against the moulding hole of the flask. The filling tube has on the outside a small rim, and upon this is loosely placed a box. The channel is situated below the filling tube. The flask has on the outside of the moulding hole the thread of a screw. The tube by the rim is screwed by the box towards the flask, so that they form a con-

tinuation. The molding hole of the flask has a conical shape towards the inner side. The button of aluminum will, by this arrangement, be easily removed.

This button has to be sawn off on the inner side of the molding hole. I speak of this especially because I always leave a molding head (button) in the filling tube in proportion to its height. It gives the pressure under which I mold, and I regulate the pressure in accordance with the height of the molding head or button. I would especially call your attention to the width of the filling tube, as it enables us to use less material in the melting. All the experiments which I made, either with wide or narrow filling tubes, taught me that the wide would not produce such good results. The flask, filling tubes and funnel are of cast iron, the screws and box of malleable iron.

The heating of the flasks is done in an oven used for heating irons large enough to accommodate two flasks at the same time.

I work in aluminum in the following manner: I make two models of one impression; one of these is of plaster, clay, pnmice stone and graphite; the second only of plaster. The teeth are ground, put together on the base plate, secured by wax and the bite taken. The piece is then placed on the plaster model, then placed in the flask with the previously described composition. The back part of the model being opposite to the molding hole, the upper part of the flask is now put on the under part, and the wax patterns for the base are placed in, extending in a forked direction from the casting aperture to both sides of the arch. They are then fastened on both sides and flaked and the cover placed on. Air openings should be made from the base plate to the edge of the flask. The base plate and wax are now to be removed from the model. To avoid danger of springing, a wire of aluminum is placed at a distance of a $\frac{1}{2}$ to 1 mm. from the pins, it being secured in the composition of plaster. The two parts of the flask must now be heated slowly for three-quarters of an hour, when they can be screwed together and placed

in the warm oven and heated over the burner. The furnace is now heated and the aluminum with pulverized coal is placed in the refining pot covered by the chimney. When the aluminum begins to melt, the chimney is removed and the metal gently stirred until it is thoroughly melted, when it is poured. The flask should be about blood heat, this temperature being the best to get a good mold and without endangering the teeth. The melted metal comes in contact with the wire in its passage to the teeth, from which it is prevented from too rapidly encroaching upon them, and is also cooled to some extent. In finishing if I polish, I use steel with equal parts, by weight, of rum and oil."

(A diagram of the apparatus used by the above appears on page 630, Vol. XV, of the *Cosmos*).

In the *Missouri Dental Journal*, Vol. II, No. 4, (April) 1870, an article appears on "How to Cast Aluminum Plates," by one of the editors of mechanical dentistry. "From a plaster impression make a model of plaster and silex in the proportion of two parts plaster to one of silex. Make the model plate, take the articulation, etc., the same as for rubber work. When the case is ready for the flask pass the point of the wax knife between the wax rim and the edges of the gum, pressing the wax away about the sixteenth of an inch. Flask the case with plaster and sand equal parts. The coarser the sand the better, the object being to secure a porous mold. The flask has two tubes inserted at the back end, corresponding in position with the heels of the plate. The metal is poured into one of these tubes, passes around the mold and rises in the opposite one. When the case is set in the lower half of the flask the surface is oiled, the top part placed in position and a small roll of wax, connecting the tubes with the heel of the plate, is placed in position, and the remaining portion of the flask filled. Open the flask without heat, remove every particle of wax without boiling or heating the case. Observe that every portion of the margin of the gum is covered by a thin coat of plaster to prevent the metal coming in direct contact. Dry the case thoroughly, and raise the heat of it to about 400° before pour-

ing. The tubes should be heated to a dark red. The metal should be melted in an ordinary crucible without flux, or a little linseed oil or balsam may be used. The fire should not be too hot, and the metal should not be over-heated. As soon as it is melted, place the hot tubes in position, stir the metal with an iron rod and pour; let the case stand until cool before opening."

"A process similar to the above, I presume, has lately been patented, and flasks adapted for the purpose are offered for sale to licensees only."

In the July number of the same journal and volume appears another article on "Casting of Aluminum Plates."

"The casting of aluminum dental plates is no longer a matter of experiment; it has become a verity.

"Beautiful plates are now being cast from this metal successfully, by several different methods, the principle involved being nearly the same in all. All use a porous mold, or what is equivalent, all make use of some means to deoxidize the metal, and all cast it under pressure."

From 1870 until within the last year or so there has been but little attention given to aluminum for dental plates.

CASE IN PRACTICE.

BY DR. E. C. FRENCH, EAU CLAIRE, WIS.

A case of alveolar abscess of the anterior root of a lower twelfth year molar containing a live pulp in the crown and posterior root. A Scandinavian about 25 years of age, of a decided blond type, presented himself for the extraction of an ulcerated tooth. Face badly swollen, suffering intense pain. On examination found the sixth year molar gone, the twelfth year molar (the offending member) a sound and healthy tooth, so far as any decay was indicated. Tooth firm; no soreness from concussion excepting on a line with the anterior root. Pus was strongly indicated on a line of the jaw from the molar

in question to the second bicuspid which led me to suspect that there might be a remaining root of the sixth year molar, but on close examination could find none. Patient insisted on having the tooth extracted, proceeded to do so, using a lower cow-horn forcep. Tooth very hard to remove, and in extracting split the roots at the bifurcation, removing the entire crown and posterior root, leaving the pulp in the crown exposed. Found the pulp in a healthy condition; no inflammation indicated in the least degree on the root removed. Proceeded to remove anterior root, and on doing so it was followed by a copious flow of pus. The entire root was covered with an alveoli-dental sack containing bloody serum. This is the first real marked case under my immediate notice, during twenty years practice, where suppuration and sack had formed on any one or more roots of a tooth, the pulp in the crown and remaining root being in a healthy condition.

UNIQUE OBJECT.—We find the following interesting item in the proceedings of the San Francisco Microscopical Society, published in *The Microscope*: "Perhaps the most unique object on the entire list was that shown by Prof. Hanks. It was an insect of a species now extinct, perfectly preserved without the least apparent distortion, in a block of amber, wherein it had rested for untold ages. As compared with this perfect specimen of nature's embalming, the mummy of Egypt's most ancient king is a thing of yesterday."—*H.*

RIGHTEOUS INDIGNATION.—A writer in an exchange thus introduces some eloquent and forcible remarks on a case of abortion which had come to his knowledge: "The low muttering thunders of destruction and roaming blizzard of the birth-strangled babe have just swept over our sister city, Atlanta, and now begin to disturb the gentle zephyrs of the Magic City."

SOCIETIES.

ETHICS.¹

BY GEO. L. SHEPARD, D.D.S., SEDALIA.

Mr. President and Gentlemen of the Missouri State Dental Association :

At our last meeting, when I was elected a member of the Committee on Ethics, the thought occurred to me that during the many meetings of this association that I have attended it has seldom, if ever, been my privilege to hear the subject of ethics discussed in any general way. Surely this is a subject in which all should take a great degree of interest, one that I believe is but vaguely understood by many of our members, and one, too, where the experience of the older practitioners might be of very great benefit to those who are now struggling with the very difficulties that they passed through many years ago.

I shall not presume in this paper to instruct upon a subject which is already well understood by so large a number of you, but shall rather call attention to a few points in the hope that a friendly discussion of them may be of mutual benefit.

We are possessed of a very excellent "code of ethics," one which, if carefully observed by all of our members, would place us upon a very high plane of moral and professional excellence, but alas for human weakness even among dentists.

Who of you gentlemen who votes to reprimand, suspend, or otherwise punish a brother for a violation of Sec. 3 or 5, Art. II, of our code, has observed section I of the same article in its entirety? I fear that if the purely innocent alone could vote

¹Read before the Missouri State Dental Association, June, 1887.

to punish a brother found guilty of unprofessional conduct, he would most likely go unpunished, but allowing that all have kept all of the code preceding Sec. 2, Art. II (the section regarding advertising, calling attention to peculiar styles of work, claiming superiority over neighboring practitioners, etc.), I venture the assertion that the man who has practiced dentistry for a number of years and who has not been strongly tempted to break or evade some of the provisions of that section, is one upon whom fortune has smiled in an unusual degree.

There is a laudable desire on the part of every active, energetic man to push business.

To be obliged to sit calmly down and patiently wait for business to come to you during a long season of dull times, and not be able to invite, urge, or push out after something to do, is simply exasperating to a nervous man, particularly if he has a large family dependent upon his exertions. Doubtless some of us can call to mind cases where dentists have maintained a good professional standing for years and at last succumbed to the financial or nervous pressure and by an endeavor to increase his practice has consigned himself to the ranks of charletans and mountebanks, which have ever been an incubus on the outskirts of every profession.

While Recording Secretary of our association, I received letters from members who contemplated resigning their membership, stating that it was of no use to struggle against the current of low prices without advertising. Many of these cases are more deserving of sympathy than blame.

We need to exercise that charity that suffereth long and is kind, that envieth not, is not easily provoked, thinketh no evil, beareth all things, believeth all things, hopeth all things, endureth all things, that charity that never faileth.

A mania to purchase at the lowest possible price has seemed to possess many of the people of this country for a few years past, and the endeavor to meet this demand without loss, has resulted in the deterioration of the quality of manufacturers

and the adulteration of articles of food and various similar disastrous conditions.

The demand for cheap dentistry has kept pace with the general rout, and this has been a serious annoyance to the dentist who endeavors to do the fair thing by his patients, his brethren in the profession and himself.

The next point which I wish to consider is the last clause of Sec. 5, Art. II, as follows :

“And it is even to be regarded as unprofessional to warrant operations or work, as an inducement to patronage.” I do not know how rigid an interpretation is generally put upon this clause, but I do know that our patrons have a right to some assurance as to the ability and integrity of the person to whom they entrust their mouths for the various operations the dentist is called upon to perform. This assurance must be given by the dentist himself especially in the first years of his practice. It is not necessary to do this through the medium of the daily paper, or bills or cards, scattered far and wide; and for a young man to “warrant all operations strictly first-class,” is certainly overstepping the bounds of modesty and will in no case redound to his credit.

I trust that the apparent difficulty of this section may be elucidated by a fair and kindly discussion of the subject. The last clause in our code deserves a passing thought. It reads as follows: “The public has no right to tax the time and talents of the profession in examinations, prescriptions, or in any way, without proper remuneration. Doubtless we all endorse that most heartily, but the difficulty is, the law is given to the wrong party. This portion of the code should be given to our patients and a penalty inflicted for a violation of it. Seriously, the dentists themselves are to blame in this matter, by permitting and often encouraging the pernicious custom of making examinations free of charge. This should in no case be done for strangers. I will not say that it may not be done for your regular patrons and their friends, but to make examinations free of charge for others is to encourage a competition in price rather than excellence of work, a point which needs to be jealously guarded.

The person who undertakes to criticize or point out defects in a law or custom, should also attempt to indicate a remedy.

The most potent agent in removing the evils to which I have referred seems to me to be the higher education both of the dentist and the patron, especially the latter.

The profession have been and are through the medium of our dental colleges, journals and associations making rapid advancement in the understanding of the specialty which we practice, while the enlightenment of the public has been chiefly relegated to their practical experience gained in the operating chair and a little oral instruction in our offices, we need to go much further than this.

If the present generation of dentists expect to derive any benefit from it, the instruction must be much more rapid and widespread than can be given in this way. I am well aware that many attempts have been made in the way of pamphlets, papers, etc., for circulation among our patrons, but so far as I am aware they have not met the encouragement which they deserve.

Ought not our associations to take hold of this matter.

Would not a pamphlet, or better still, a periodical devoted to the instruction of our patrons and the general public, published under the authority of a state association and subscribed for in such numbers that it could be placed within reach financially of every dentist for gratuitous distribution, prove of mutual benefit to patient and practitioner?

Or, if such a plan be not practicable could a committee on dental literature for the people be appointed and devise some means of instructing the masses on this subject, in which such a vast number are now profoundly ignorant?

Enough has been said in this paper to open the way for a discussion of this subject if you consider it worthy of your time and thought.

In closing, let us keep in mind that short, simple and complete rule of ethics, grand in the perfection of its beauty, when fully observed, meeting every requirement of professional and social life, given to us by the greatest teacher that ever lived,

"Therefore whatsoever ye would that men should do to you, do ye even so to them."

BRITISH DENTAL ASSOCIATION.

ANNUAL MEETING IN GLASGOW.

[CONCLUDED FROM PAGE 462.]

SECOND—THE BENEVOLENT FUND.

Sir Edwin Saunders, F.R.C.S., submitted the treasurer's report, which showed that the income during the past year amounted to £369 6s 4d.

The invested capital now reached £863 5s, and last year it yielded an income of £20 4s. It must be most satisfactory to the subscribers to the fund to learn that the total expenditure for the year amounted to only £5 15s.

Mr. S. J. Hutchinson read the secretary's report. It stated that the general business brought before the committee during the year had been on the increase compared with past years. The number of children who were being educated at the expense of the fund was eleven.

ANTISEPTICS IN DENTAL SURGERY.

Mr. E. Lloyd Williams, London, read a paper "On the Value of Antiseptics in Dental Surgery." He said he was convinced of the importance of his subject, not only in its purely scientific aspect, but more particularly in its practical bearing upon the every-day work of modern dentistry. It would be his endeavor to touch upon the broad principles which should rule over their practice, and to suggest a few special points of treatment which had been found valuable, rather than to formulate any hard and fast laws or dogmatise upon pet theories and particular methods. The debt of modern surgery to Sir Joseph Lister was difficult to gauge; but they were apt to

lose sight of the fact that they owed less to what was known as strict "Listerism" than to the great doctrine of cleanliness which underlay all the teaching of that eminent surgeon. The great principle which regulated all operations and which had been the foundation of success was absolute surgical cleanliness. He feared that as dental surgeons they had even yet scarcely grasped the importance of that principle. It was true that their sphere of surgical work was limited, and that they were concerned for the most part with hard tissues, which they looked upon as being comparatively indifferent to external conditions; but they must not forget that even in the simplest operation they had to do with living material, not to speak of those branches of their work where they were brought face to face with ordinary surgical conditions, and when the result of their treatment was wrapped up with the constitutional welfare or woe of their patients. Nature stood more in-sult in the mouth than in any other part of the body, and her long suffering had admitted of much reckless treatment with comparative impunity. There was probably no operation on any part of the human body commensurate with that of wrenching a tooth from its bony socket where the repair was so rapid and the after effects so slight. If this were not so they should probably approach the mouth with a far greater degree of caution, and should employ every possible antiseptic precaution for procuring a minimum of local and constitutional disturbance. But it yet remained to be proved how far they could improve upon present results by being more cautious, and he felt confident that in special cases antisepticism must lead to more brilliant results if carried out with thoroughness. There was another side to the question which must not be lost sight of. It was well for them that there were so few recorded cases of inoculation from the mouth, but that was no reason why they should employ dirty instruments. Cleanliness, then, should be an elementary but essential principle of their practice. All their instruments should be not only clean, but, where at all probable, to come into contact with the soft tissues, absolutely aseptic.

A discussion followed, and Mr. Williams was awarded a vote of thanks for his paper.

THE APPLICATION OF ELECTRICITY TO DENTAL USES.

Mr. A. Kirby, Bedford, contributed a paper "On the Application of Electricity to Dental Uses."

THE DENTAL ASPECT OF PUBLIC HEALTH.

Dr. George Cunningham, Cambridge, read a paper on "The Dental Aspect of Public Health," with a view to a discussion on the progress of the question raised by Mr. W. M. Fisher and himself. The efficient treatment, he said, of so great a question must no longer be left in the hands of a few, no matter how energetic they may be, and his object was to suggest some plan of campaign which, after due discussion and approval, would receive the weight and influence with which the corporate and united action of their association could imbue it. Everyone recognized the fact that the diseases with which the dental practitioner dealt did out directly contribute to the death-rate, and that they were neither infectious nor contagious. Hence, doubtless, arose the utter indifference of the community with regard to them, nor would that indifference be removed until they realized the contributory and indirect influence which they had on the death-rate. State medicine being possible marked an epoch in which some sanitary rules received a general consent, and indicated an advancing civilization. Was it too much, Dr. Cunningham asked, to demand that State medicine should include State dentistry? He thought not. It was both the duty and the interest of the State to protect the helpless child from the results of dental, as well as other disease, whether arising from the ignorance, the neglect, or the incapacity of the parents to provide the necessary treatment. In this consideration the very important fact should be recognized that from a lack of attention in the period of their youth men and women of the future were allowed to grow up with the inevitable certain-

ty of future suffering, a large proportion of whom could only be radically treated between the ages of from 10 to 15 years. This naturally brought them to the consideration of Mr. Fisher's contention for the compulsory attention to the teeth of school children; and no intelligent reader, whether professional or otherwise, could but admit that he had succeeded in proving his case. Some would be inclined, perhaps to scout the proposition of compulsory attention as visionary and utopian, while others, admitting the advantages of such a scheme, might think they disposed of the question by stamping it as a rank socialism. Again, many hearty sympathizers with this great project were at once taken aback by the economical difficulties of its institution. It was no use disguising the fact that this was a most serious aspect of the question. Everyone would be quick to recognize the increased charge upon expenditure but comparatively few had the power that they possessed of realizing that it would be rather a mere transfer of liability already incurred in some other way if not absolute saving of expenditure in other directions. The question might be postponed for a time, but a sense of patriotism should urge them on to be leaders rather than followers in a movement which time itself would hurry on. Without referring to the action which some of the American dental societies had taken in promoting attention to the teeth of school children—in France, where no powerful association such as theirs existed, measures had been taken for the inspection and care of the teeth of children in the schools of Paris—he would ask them for a minute to consider how this important matter affected the services. There could be no doubt whatever that the Army Medical Department recognized the advisability and the necessity of remedial treatment other than that by mere extraction. If this were not the case no provision would have been made for the supply of tooth-stopping and scaling instruments. The nature of the provision, however, was so absurd that they were doing a service alike to the soldier, the army surgeon, and to the already heavily-burdened taxpayer in calling attention to the fact. Who until the other day ever

supposed that gold foil was provided for the filling of the soldiers' teeth; but did any army man ever know of the gold foil reaching the mouth of Tommy Atkins? In these days of government inquiry, it might not be uninteresting to find out something about this misapplication of the nation's funds, for as experts they recognized the utter impossibility of properly manipulating not only the gold foil, but the amalgam and gutta-percha also provided with the absurd equipment of four scalers and stoppers, and three excavators and roseheads. Nor was that all. Not only were the materials provided absurd, and the equipment utterly inadequate, but the army regulations only provided for one such case being kept at headquarters of each military district. The least intelligent inhabitant of Glasgow would see the absurdity of the provision when he knew that the whole of Scotland constituted but one military district. But even were the materials, the instruments, and the distribution of the equipment all that they could desire, what was the use of it all if the army surgeon had had no training in necessary manipulative skill. He could not help feeling that, now the attention of the department had been called to this very important question, they should recognize and put in force the power they undoubtedly possessed of requiring all the army medical candidates to produce evidence of having received at least an elementary training in dental surgery. He concluded by submitting the following resolution:

"That this meeting is of opinion (1) that wherever the state provides medical services, dental services should be provided for as an essential part of such medical provision.

"(2) That, having regard to the great importance of securing competent attention to the teeth of the army and navy, the representative board should consider the advisability of urging the government to make suitable provisions to that end.

"(3) That, considering the compulsory attention to the teeth of school children would be a national gain, the representative board should be empowered to further the matter in any way they deem most fit."

After discussion the resolution was adopted.

At the afternoon sederunt a demonstration and exhibition of instruments took place in the Dental Hospital, George Square.

The annual dinner of the association was held last night in the Grand Hotel, Charing Cross. Mr. J. R. Brownlie, president of the association, occupied the chair, and Mr. J. S. Woodburn and Mr. Rees Price acted as croupiers. There was a large representation of the members of the association. After the loyal toasts had been heartily responded to, Mr. Morton Small said that if they were part of the medical profession they should be governed by the same body that governed the rest; but it was said that they had no representative on the council, nor a few years ago had the gynecologist, the ophthalmologist, the aurist, etc., but let them wait their turn, and they would see how soon they would get their representative. Every few years a certain number of members of the profession were elected by the medical profession to represent it in the council. At the next vacancy let them select a dentist, and run him in, and let them work with a will, and he ventured to say that they would land him on the council to take charge of their interests. Other toasts followed.

THIRD DAY—SATURDAY 20.

On the Saturday morning a special train conveyed the members of the association from Green street to Dumbarton. Messrs. Denny, shipbuilders, there invited the members to visit their shipbuilding yard. The party was conducted by Mr. Denny himself, who explained the use of the different appliances. Before leaving he invited all to partake of cake and wine which he had provided right royally. We then embarked on the S. S. Shandon, when a very hearty cheer was given Mr. Denny for his kindness and liberality. The band at this point played "For He's a Jolly Good Fellow," which was also sung by the company. Leaving we proceeded to prince's pier, Greenock to pick up a few who found it impossible to be present earlier; thence right across the firth, passing the Great

Eastern at a distance, and up Loch Long. Luncheon was served on the way up. Arriving at Arrochar the boat was turned homeward. The younger members of the party enjoyed themselves dancing to the strains of music provided by the band engaged by the West of Scotland Branch of the B. D. A. Arriving at Dumbarton about P. 5,30 M., we returned to Glasgow by special, all delighted with their day's enjoyment.

This terminated another successful meeting of this representative association.

W. M. ADAMSON, L.D.S.,

49 Abbotsford Place, Glasgow, Scotland.

ODONTOLOGICAL SOCIETY OF SOUTHERN CALIFORNIA.¹

From the nature of the case, medical societies have to be more or less theoretical, while a properly conducted dental society is intensely practical and is of far greater value in imparting information of practical importance. Ideas and methods gained here can be taken home and immediately put into practice and thus benefit suffering humanity.

Think of men eminent in our profession.

Not one of them stays away from our grand society meetings, nor are they indifferent in their local dental gatherings; and I venture to assert that the further we go into the science of dentistry the less we desire seclusion, the more eager we are to meet men of advanced thought and compare experiences with them, see their work, discuss different methods of practice and by so doing gain far more practical knowledge in one dental society meeting than could be acquired by years of hermit study and practice.

I heard of one hermit recently that had not seen another dentist work for thirty years. He had traveled in the same groove so long that he firmly believed there was no better way. * * *

¹Extract from the address of Dr. John C. McCoy, President of the society.

Our society meetings not only benefit its members in ways just mentioned, but they stimulate them to deeper research and to a more skilful practice. They return to their homes full of enthusiasm. Their daily labor is no longer a task performed for a small fee, but they are lifted above mere mechanics and tradesmen to the atmosphere of scientists and philanthropists, who are willing to sacrifice for the benefit of suffering humanity. They feel and realize that success in dentistry does not alone consist in dollars and cents.

There is no other power or means operative among dentists that serves to unify and ennoble the profession as our society meetings. It is here we come in contact and get acquainted with our best minds and most skilful workers. It is here we all meet men who know and tell us things we never thought of. It is here we learn to respect our professional brother. It is here that manhood and professional character shine forth. It is here that men are developed, stimulated to better practice, uplifted to nobler attainments, united in bonds of common sympathy. All these serve the grand purpose of ennobling the profession, raising it to a higher standard. It is by such means our profession has made such rapid strides of advancement in the past few years and at last wrung from the medical men an acknowledgment of our equality and a place in the Ninth International Medical Congress. The world moves. Dentistry is making rapid strides. Reports come to us through the the journals of wonderful improvements in all branches of the profession. Very interesting society reports come from all parts of the country. * * * Do you realize what there is to do, and do you feel the need and importance of intercourse with other dentists, such as we have in a well regulated dental society? For myself, I feel a pride in having the profession of Southern California equal to any other section of our country, and I have spent time and money without stint in order to advance the cause. * * *

In regard to programme, I would suggest the meeting be made intensely practical. Let clinics predominate. Talking clinics—let operators explain each point, give a reason for his

method and be willing to answer all questions in regard to it. Exhibition clinics are useless except in a show. The object of the clinic is to impart instruction. May it be understood after this that a clinic must begin at the beginning and carry the work through all its parts and finally present a completed operation.

MASSACHUSETTS DENTAL SOCIETY.

The twenty-third annual meeting of the Massachusetts Dental Society will be held in Boston Thursday and Friday, December 8 and 9, 1887.

The Executive Committee is doing all in its power to make this meeting a profitable one, and asks for your hearty co-operation. Mark the time of it now and be at the meetings from start to finish. Full programme will be issued later. By order Ex. Com.

GEO. F. EAMES,
Secretary.

THE DEATH OF PROF. VON LANGENBECK, the Nestor of German surgeons, occurred from an apoplectic seizure, September 29, 1887. The deceased was born in 1810 at Hamburg, in the province of Hanover. He studied at Göttingen, where he graduated in 1835. Shortly after establishing himself in Göttingen as privat docent in physiology he was nominated professor of surgery of the University of Kiel, and director of Frederichs Hospital there. At the early age of 40 he became professor and director of the Berlin Royal Surgical Clinical Department, the greatest of its kind in Germany. After the Danish campaign of 1864, he was ennobled by the King of Prussia. In civil life he also attained a position of great eminence as the leading surgeon of Berlin. His reputation as an operator is world wide.—*British Jour.*

EDITORIAL ARTICLES.

SAINT LOUIS DENTAL SOCIETY CLINICS.

The first clinic of the St. Louis Dental Society was held at the Missouri Dental College Infirmary on October 29, from 1:30 to 5 P. M.

The clinics will continue to be given monthly on the last Saturday of each month excepting, possibly, the mid-summer months. The members of the society have for some time been agitating the subject of holding clinics and are highly gratified with the flattering success of the first effort.

The following members were appointed to give clinics at the first meeting: Drs. J. B. Newby, J. W. Wick, A. J. Prosser and William Conrad.

Dr. Wick was the first to put in an appearance at the infirmary and immediately proceeded to give a clinic. Mr. Hugo Wangelin of the senior class was anxious to have a tooth filled and was taken in charge by the doctor. The tooth to be filled was the superior left second bicuspid, the cavity being in the distal surface and quite large, dangerously near the pulp. The doctor illustrated his method of adjusting the rubber dam. He punched three holes in the dam placing a molar clamp on the clamp forceps, passed the clamp partially through the hole to embrace the first molar and placed the clamp in position, adjusted the dam to the first molar, second and first bicuspid, using a ligature on the first bicuspid.

The cavity was prepared and a Call matrix adjusted. The cavity was filled with Rowen's Gold Rolls No. 1, the first rolls introduced being unannealed followed by annealed rolls.

The special features in Dr. Wick's clinic were the adjustment of the dam as described and doing his his own malleting using a steel mallet.

Dr. Prosser filled a distal cavity in the superior right second bicuspid for W. A. Roddy, of the senior class. He also adjusted the rubber dam over three teeth, the molar and both bicuspids. The doctor used no matrix, started the filling with tin foil, followed with No. 4 gold foil and Kearsing's pellets. In starting the filling the malleting was done by an assistant followed by the Bonwill Engine Mallet. The Bonwill mallet is adjusted directly to the spiral shaft and sleeve of the White engine, the attachment to the engine being completed by using a Webber pulley. The advantage of this arrangement is in relieving the hand of the weight of the hand-piece. This device is Dr. Prosser's invention and his special pet.

Dr. Conrad demonstrated the immediate filling of a root of the superior left second bicuspid preparatory to crowning, for R. E. Kiernan, also of the senior class.

The doctor depends on hydrogen peroxide in cleansing the debris from the root, disinfects with pure carbolic acid and dries with alcohol and chloroform. In filling the root he first introduced liquid gutta percha finishing with gutta percha points; he also demonstrated the forming of gold crown grinding surfaces using the Knapp anvil. He objects to the use of the Knapp blow pipe as it destroys the malleability of the gold.

Dr. Henry Fisher presented a case of necrosis of the alveoli of the superior left first, second bicuspid and first molar. The case was a very interesting one and we hope to give our readers a full account of it in a subsequent issue.

A correct record of all that is performed at these clinics will be kept for future reference and discussion. H.

DENTISTRY AS A MEDICAL SPECIALTY.

I have here copied from a "Text Book on Anatomy, Physiology and Hygiene," written by "John C. Draper, M. D., LL.D., Professor of Natural History and Physiology in the College of the City of New York, and Professor of Chemistry in the Medical Department of the University of New

York," as a specimen of dentistry as a medical specialty. He says: "Immediately within the lips are the gums, composed of the alveolar processes of the maxillary bones, covered by thick mucous membrane. In the gums the teeth are fitted. * * * The bulk of the teeth consists of substantia osteoidea, or bone ivory. * * * The cavity in the body of the tooth is filled with a fatty pulp, in which the blood-vessels and nerves subdivide before they enter the substantia osteoidea. From the great hardness and density of the enamel of the teeth we shall hardly expect that tissue supplied with so delicate a constituent as a nerve, but the presence of nerves in the enamel is demonstrated by the pain produced when a small hard substance, as a grain of sand, is entrapped between the teeth while masticating. The nerves gain access to the pulp through a canal in each fang; whenever, therefore, there is any inflammation either of the fang or of the crown, the substantia osteoidea is swollen, and, pressing upon the nerve, produces tooth-ache, that most annoying of maladies."

L. C. INGERSOLL.

POOR OLD MISSOURI:

Says Dr. Hungerford, one of the editors of the *Western Dental Journal*, "don't seem to have *Transacted* this year or done anything but elect officers except through the columns of the *Western Dental Journal*." Nearly correct, Doctor, and if the *Western Dental Journal* had confined itself to the minutes of the secretary and the papers read at the meeting, as the ARCHIVES has done, instead of publishing the mass of garbled, ambiguous, unintelligible misstatements it has given to its readers as a stenographic report of the proceedings of the Twenty-third annual meeting of the Missouri State Dental Association, it would have reflected much more credit on the visitors and members of the association who took part in the discussions, for scientific attainments, not to say common sense.

The editor continues: "However, some editors claim that

they don't propose to waste space on society proceedings, but they are always on hand when it comes to keeping others from getting them." Does he refer to the editor of the ARCHIVES? We have announced that we will not publish transactions of societies as other dental journals are doing, but we have never objected to any other journal publishing such reports if they saw fit. We do not believe it is for the best interests of any dental society to give the exclusive right to publish its proceedings to any journal, entrusting it with the entire work and care of preparing the report of its discussions, etc. The result is too apt to be what is so beautifully exemplified in this report of the Missouri State Dental Association meeting, prepared and published by the *Western Dental Journal*, a by-word and a reproach. If the visitors at this meeting and the members, ourself included, have been guilty of such a display of egotism and ignorance as the stenographic report of the *Western Dental Journal* credits us with, we ought certainly to learn to do better or keep our mouths shut. Silence would be golden in comparison. Better far will it be for the honor and dignity of the profession of Missouri for the Association hereafter to meet, "elect officers," and hold a quaker session in silence, so far as the world may hear, than to do much work and be so incorrectly reported. We have never played the dog in the manger in this matter, but should we be present at the next meeting of the Association we shall regard it as a duty we owe the Association and profession of Missouri to prevent a repetition of this journalistic report of its proceedings.

One victim (a visitor) of this alleged stenographic report, writes us as follows: * * * "In the *Western Dental Journal* I find a report given of my remarks upon Dr. Patterson's paper upon the Cervical Wall. * * * If I did not make myself any better understood in what I said, and so thoroughly egotistical as the report would make me to have represented myself before your body, I think I am deserving of severe censure, and wonder that I was tolerated at your hands instead of receiving the very kind consideration I did."

A CORRECTION.

The Australasian Medical Gazette of September, 1887, contains the following letter :

Offices of the Board, 120 Phillip street,
Sydney, 23 August, 1887.

Sir.—In reply to your letter of to-day's date, asking for information as to the truth of the statements made by F. K. Lambert in the *ARCHIVES OF DENTISTRY* for May last, I have to inform you that no legacy whatever from Mr. Fairfax, or anyone else, has ever been bequeathed to the Sydney Technical College.

Neither Dr. Slate nor Dr. Symes has ever been in correspondence with the Board of Technical Education. As to the implied connection of Drs. Slate and Symes with the Sydney Technical College, the statement contained in F. K. Lambert's letter is absolutely false.

We have a class of mechanical dentistry attended by twelve students, taught by Mr. H. G. Low, but with this neither Drs. Slate nor Symes has any relations whatever.

I am yours, obediently,

EDWARD COMBÈS, President.

The Honorable J. M. Creed, M. L. C.

We believe that Dr. Lambert was sincere in making his statements referred to above, but had been misinformed ; perhaps he had been reading the daily papers of Australia. In explanation, read the following from the same page of the *A. M. G.* :

A CORRECTION.

In the beginning of July, a telegram appeared in the Sydney daily papers and in the Melbourne *Argus*, stating that Dr. Hallowes, while on a visit at Bourke, died suddenly through the bursting of a blood-vessel ; this report found its way into the August number of the *A. M. G.*, and we are now pleased to inform our readers that this report is not correct, as we have received a communication from Dr. H. C. Hallowes, of

St. John street, Launceston, Tasmania, who is the only practitioner of that name throughout the colonies, informing us that he is still alive, and practicing at Launceston as heretofore. We regret that such a mistake should have occurred, and we hope Dr. Hallowes may continue to practice his profession for many years to come.

IS IT RIGHT? NO!

We have not before, with other editors scored Dr. Welch, editor of *Items of Interest*, for appropriating original matter without giving due credit. It was not because he had been guiltless, but because we thought it an oversight on his part.

In his October number, page 458, is a half page article on "Neuralgia from Affected Teeth," which is taken word for word from the June number of this journal, page 228. The author's name is placed at the end of the article, indicating originality. In the same number we notice another article appearing as original which first appeared in the *New Orleans Medical Journal*. Doctor, we are not jealous of your power or influence, but we are jealous of our original matter which, though often showing defective editorial work, costs time and trouble to revise manuscript, read proof and correct forms. —*Southern Dental Journal*.

We, too, have been forebaring when we have noticed these little oversights or errors on the part of Brother Welch. Knowing his many virtues and the perversity of the printer, we have not called him to an account, but the frequent recurrence of them constrains us to join our brother of the *Southern Dental Journal* in calling a halt on the doctor. In the October number, page 450, *Items of Interest*, appears as original matter an article entitled "Dental Societies," by Parsons Shaw. This is an extract word for word from an article entitled "A Plea for Dental Societies and Practical Education for the Dentist," published in the ARCHIVES OF DENTISTRY, Vol. IV, No. 1, P. 1. Doctor, render into Cæsar the things that are Cæsar's, give

credit where it is due; observe the law, and may you live long and be happy.

Our friend Hungerford, of the *Western Dental Journal* has overlooked us in his October number, page 466. The article entitled "To My Patients" is an editorial from the October number of *ARCHIVES*, but we forgive him, feeling confident that he will not forget us next time.

ARSENIOUS ACID AND IODOFORM.

A number of formulæ have appeared in the journals during this year, professing to destroy the pulp without pain; all of these have been given in this journal and nearly all of them given a trial, but they have "not invariably succeeded in making devitalization a painless process."

Dr. James Truman gives in the *Cosmos* for November his experience with a mixture of iodoform and arsenious acid; he thinks he has found a "painless devitalizer under all conditions." He writes: "The number of cases now treated, covering all conditions of pulpitis, justify the opinion that the pulp can be devitalized while in a highly inflamed condition without a particle of pain. * * *

The mode of using is very simple. The usual precautions are adopted of rubber-dam, drying the cavity etc. Then I take the amount of arsenious acid I propose to employ, it being understood, of course, that there is no change from the usual practice in this respect; place the arsenic on a glass slide kept for the purpose, and add an equal quantity of iodoform, or an excess, it not being material; then a five per cent solution of carbolic acid in sufficient quantity to make a paste; and the whole is carried to the pulp on a piece of cotton the size of a pin head. This should then be covered with a cap made from platinum, or, which is equally as good, red gutta-percha; then cover in the usual way."

A good way to cover the application is to fill the cavity rather loosely with cotton, and then add a drop of sandarac varnish.

H.

THE EFFECT OF MATTER OVER MIND.

Occasionally a patient calls to have a tooth extracted which you at once recognize should be saved. You advise filling the tooth, but your patient insists upon extraction and is deaf to all the reasons you can present in favor of saving it. A dentist from Iowa related an incident of this character which occurred in his practice recently; and his method of producing a change of mind in his patient, after all his arguments had failed, is so novel that we give it for the benefit of whom it may concern. The dentist said all he could against extraction and in favor of having the tooth filled, but his patient insisted upon having it extracted. It had given him a great deal of pain and he had resolved to have it out, and out it must come. All right, said the dentist, I will take it out. Stepping to his forceps drawer he gathered a handful of the most formidable looking ones; placing them in the lap of the patient, he requested him to hold them till he selected one to suit the case. The sight of these instruments of torture was too much for the victim. The effect was magical, it changed his mind in an instant, and he exclaimed, "take these things away and save my tooth if you can," and he saved it.

A NEW PLASTER BIN.

One of the most convenient receptacles for holding plaster for use in the laboratory may be had by using "Clark's Wonder Flour Bin." This bin is made of tin in the shape of an ordinary oil can inverted, the bottom of the can being the top of the bin, with a removable cover. It is intended to be suspended on the wall, directly over the table. At the bottom or small end is attached an ordinary flour sifter, with cap to cover it when not in use.

The flour is put in at the top and passes through the sieve when the handle is rotated. For plaster it should be modified by attaching a short funnel to the lower edge of the sifter.

The opening in the small end of the funnel should be about an inch and a half in diameter. To this opening a cover is attached by a hinge with a hasp to hold it when shut. The bin is suspended over the plaster table, the plaster put in at the top, and when wanted place the bowl in which the plaster is to be mixed containing the necessary amount of water directly beneath the lower end of the bin, drop the cover and rotate the handle slowly, and the plaster will be evenly sifted into the water, the only correct way of mixing plaster. Try it and you will be pleased. E.

HE WANTS A DIPLOMA.

The most cunning scheme to make sure of a diploma came to our knowledge recently. A conceited individual wrote to the dean of one of our dental colleges proposing that he be given an examination for graduation; in case he succeeded he would pay all the fees and attend the course of lectures and receive his degree at the regular commencement next spring. Should he fail he could try again at some other school and perhaps in time he would be able to find some college that was sufficiently lax to accommodate this smart Alex. The dean has carefully filed away his letters and will scan the list of graduates of the various colleges at the next commencement. H.

Alfred S. Gubb, M.D., F.R.S.C., London, Eng., reports a case in the *Medical Register*, April 2, which he said was "peculiar from the fact that nothing pointed to the nature of the complaint." I think the "complaint" is a very common one and that every symptom pointed directly to it. Now notice the symptoms as he states them. "The patient was seized with shivering and violent headache, obstructions in the nostrils, and, in fact, all the symptoms of a severe cold in the head. The next morning he still felt a shiver in the back. He complained of neuralgia on the left side of the upper jaw, and

said his sight was weak." Now the "shivering" alluded to often occurs when there is pent up pus in the system and "neuralgia," together with "weak sight" would certainly point to the locality. The pressure on the walls of the antrum and the optic nerve would cause pain and the "weakness of sight," but he does not still understand the complaint.

After giving more marked symptoms he goes on to say: "On the third day the symptoms still persisted. His teeth on the left side above were very tender on pressure upwards." It would seem that these symptoms were quite enough to point directly to an engorgement of the antrum, but he says "no explanation could be found for his condition." He says further on, "there was deep seated tenderness over the antrum on the left side. On the fourth day a copious discharge of sanious pus took place from the left nostril. Immediately following this the patient became much easier."

Judging from his treatment, which will be noticed further on, I take it that he did not recognize the seat of this disease even after the discharge of the pus. The symptoms taken altogether are pathognomonic, and a mere tyro in dental surgery would have recognized engorgement of the antrum.

Now notice his puerile treatment. "He was ordered to syringe out the nostril with a weak tepid solution of boracic acid, and to take a pinch now and again of the powdered acid." As well to have applied it to the bottom of his foot so far as the antrum was concerned. Had he made an opening into the antrum his patient would have been ready for business in a few hours instead of suffering for several days.

MORGAN ADAMS.

COUMARIN AS A CORRIGENT OF IODOFORM.—A. Langlebert (*Gaz. de gynecol.*) recommends coumarin both as a deodorizer of iodoform and as an adjuvant to that drug as an antiseptic. About one part of coumarin should be used for every five parts of iodoform.

CORRESPONDENCE.

PATERSON, N. J., Oct. 10, 1887.

EDITOR ARCHIVES.—The last meeting of the First District Dental Society of New York, was a notable one—not so much for any startling or new thing accomplished, but for the interest manifested in professional progress, as attested by the number present (probably 200), and the enthusiasm spontaneously manifested when differences and ill feeling were brushed aside in a manly effort to give credit where credit was due—of which, more later.

The report of the Clinic Committee was interesting; they reported that from 130 to 150 dentists attended the clinic in the afternoon, attracted largely, no doubt, by the special notice that was sent out that an implanted tooth would be removed from the mouth of Dr. Younger for the purpose of ascertaining the nature of the union and condition of the pericementum.

In the report of the Clinic Committee, Dr. W. H. Atkinson, who read the report, said that the tooth removed from the mouth of Dr. Younger in the afternoon was a superior bicuspid, the fourth one that had been implanted in the same socket. This one had been there seven months, and was kept loose by being worked with the tongue, the object being to prevent bony formations about the root, and thereby disprove the argument that implanted teeth are held in position merely by a close mechanical adaptation, but that there is a real and positive union of the tissues—the nature of which was to be determined by extracting this tooth and sending it to Dr. Carl Heitzmann, the eminent histologist and microscopist, for examination. Dr. Atkinson extracted the tooth and sealed it and took it to Dr. Heitzmann, and on his report will largely

depend the solution to the query that is now going the rounds, Is there such a thing as dormant or subjugated life in the human tissues, or is it possible to restore to life or infuse with new vitality the peridental membrane of a tooth that has been out of the mouth for a number of years?

The committee also reported that a case of so-called epulis was presented which proved to be an ordinary abscess.

Dr. Crowell baked some of his continuous gum body on gold plate.

Under the head of Incidents of Office Practice, Dr. W. D. Tenison, of New York, reported a case of implantation of one year's standing that is a complete success so far.

Dr. V. H. Jackson, of Harlem, described a case of fusion between a lateral incisor and supernumerary tooth. He extracted them and sawed the supernumerary from the lateral to which it was attached the whole length of the root, replanted the lateral, and although it is over a year since the operation it is apparently as firm and solid as any tooth in the head. He exhibited the detached supernumerary to the meeting.

Dr. Kirk, of Philadelphia, gave an interesting talk on implantation. Among other things he spoke of one case where he implanted two bicuspid (adjoining) in one month. One of them dropped out in a short time while the other is to day firm and apparently a complete success. The theory he advanced to account for the difference in the result of the two operations was that on the root of the unsuccessful one the pericementum was not complete, there being a small area of the root of the tooth that was devoid of membrane, while on the other tooth the root was thoroughly enveloped with the pericementum, which theory, if true, will show the necessity of great care in selecting teeth for the purpose of implantation. He also exhibited a neat and ingenious apparatus for maintaining the sterilizing fluid at an even temperature.

Dr. Wm. H. Atkinson then read a paper entitled "In View of Past History What Shall the Harvest Be?" which, after the introductory, was very interesting. It reviewed the past struggles to raise dentistry from the slough to its present com-

manding and influential position; showing how this was accomplished by professional intercourse and the influence of public clinics, and to the First District Dental Society of New York he accorded the honor of giving the first public dental clinics that were ever given. The harvest was pictured brightly in an Atkinsonian peroration, showing the continued elevation of the profession, the spread of good will and fellowship, the willingness to forget self in the search for truth and the good of mankind, and that dentistry will continue to be as it is now "*the tip-top blue blossom of scientific attainment.*" The paper was attentively listened to and loudly applauded. And then a veritable love feast ensued. Dr. Frank Abbott took the floor and commended the paper. He reviewed his own early struggles, described the care and secrecy that operators observed twenty-five years ago to prevent any one penetrating their operating rooms to see them operate, and how, after spending some time in an office in an interior town, he went to New York, soon after reaching which city he was to his amazement invited to a clinic. He accepted the invitation greedily; he had never seen an operation performed in his life; was willing to see any one operate. He asked, who is this man who is willing to operate in public, and who invites the profession to come and see him work. The answer was, Dr. Wm. H. Atkinson, of Ninth street [applause], and there (said Dr. Abbott pointing to Dr. Atkinson) sits the man to whom is due all the credit and honor of inaugurating public clinics in the dental profession, although he has modestly given the credit to the First District Society.

Dr. W. H. Dwinelle followed in the same strain and the whole meeting became pervaded with a feeling of pleasure and gratification that the love of justice was strong enough to break all bonds and give credit where credit was due.

Dr. McCloud, of Scotland, made a very happy and interesting address, showing the good that had been done on the other side of the Atlantic by societies and clinics. He was followed by a visitor from Holland whose name I failed to get, but whose address was very apropos and who very wittily

- opened his remarks by promising not to talk to his hearers "like a Dutch uncle."

Dr. Wedgewood, of London, was also present and made a few remarks.

A combination of scientific discussion and general good fellowship served to make the meeting one of the most enjoyable held by the society in a long time. Speed the time when all society meetings shall embrace those two essential elements, and then meeting-rooms will have to be enlarged, and society ranks will fill up without solicitation. "Ring rule" will die for want of supporters and all men will feel free and equal, yes, and welcome, too, in their separate societies.

B. F. LUCKEY.

THE *Chemist and Druggist* gives the following receipt for writing on steel: dissolve powdered sulphate of copper in a small quantity of water; rub the surface of the steel over with a piece of wetted soap, so as to cover it with a thin coating; then dip the point of a pencil into the solution, and with it write or draw the required design on the steel. Let this remain for a short time and then wash off and the steel will be found to be beautifully and permanently engraved. Every physician is very careful to protect his books, why not write his name upon his instruments also? Then if an office is robbed it will be an easy matter to claim instruments that have been taken.

I REGARD the use of beer as the true temperance principle. When I work all day and am exhausted nothing helps me like a glass of beer. It assists nature, you understand, said Remson to Benson. "It makes a fool of me," Benson replied. "Just so," exclaimed Remson, "that's what I say; it assists nature."

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In order to do this I made it a point to find out what were considered by Dentists to be the most important requisites in a dentifrice. I soon learned that, while opinions varied as to the best materials to be used, nearly all were agreed upon a few essential points, namely, that a *powder* was more effectual than a *liquid*, that it must be a powder free from harsh or gritty substances and perfectly soluble; that for universal use it should not be medicated, that healthy gums needed no tonic, and that in cases of diseased gums it should be left to the discretion of the Dentist to prescribe the needed remedy. With these facts to start with I then set myself to work selecting the best materials, combining them in the best manner and putting them up in the most convenient form. I need not say that this has been a work of years, and that I have been all the time studying and learning, until now, after an experience of eighteen years, I can confidently present my **Tooth Tablets** and my **Tooth Powder** as the result of my labors. They are made from the same materials, but put up in different form, each in ENAMELED METAL BOXES, which are free from the mishaps incident to glass or wood, and best adapted to the wants of the people, especially those who travel.

They will be found in all the leading stores where such goods are sold, and where Dentists can recommend their patients to call for them. This obviates the necessity of Dentists keeping such preparations, which has proved by experience to be generally unprofitable. I should be pleased to forward a sample of my TABLETS or POWDER to any Dentist, free of expense, on receipt of a postal card giving address, that all may have an opportunity to test its merits. I am,

Respectfully yours,

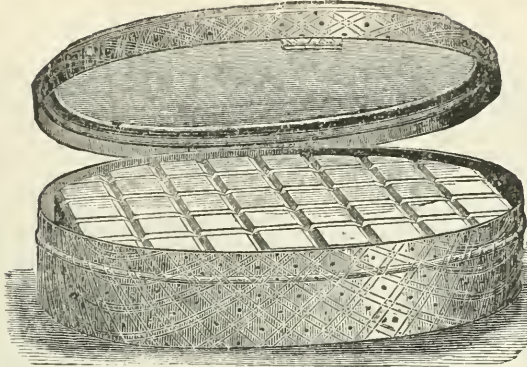
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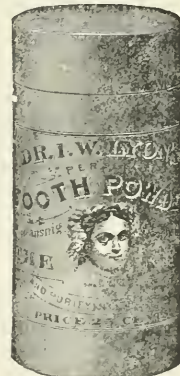
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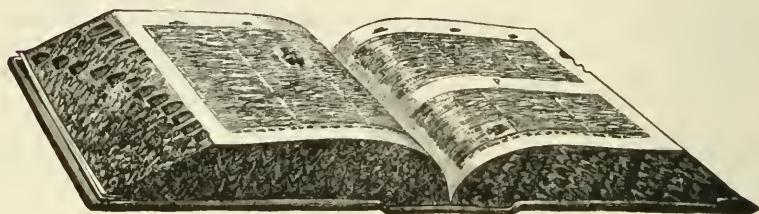
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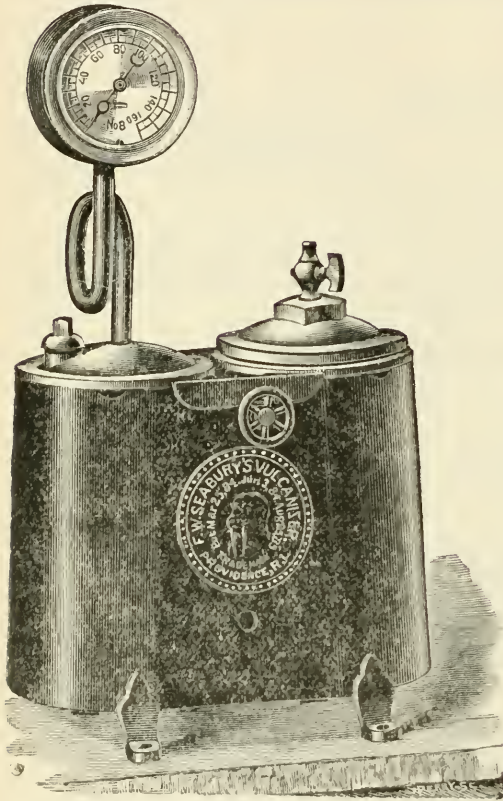
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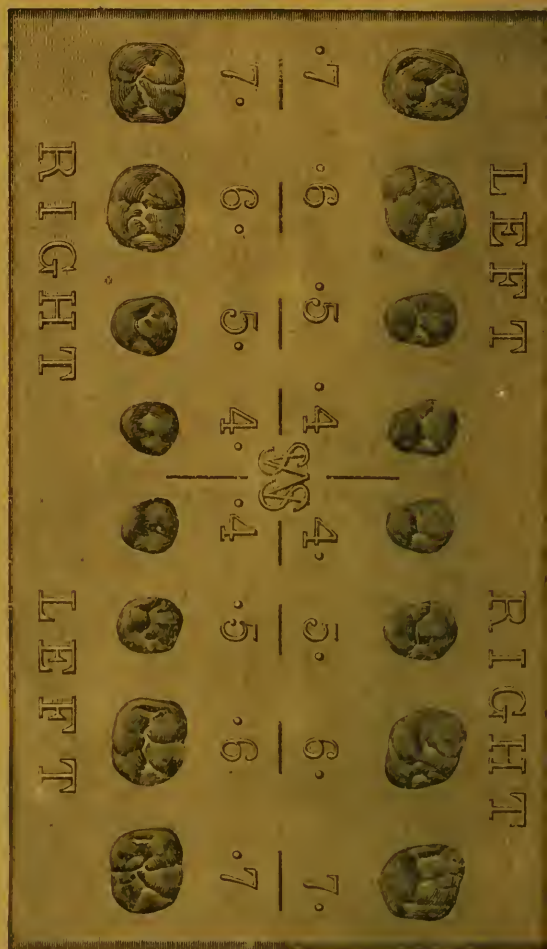
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FOOTPRINTS OF A PROFESSION OR ETHICS IN
MATERIALS AND METHODS.

BY HORATIO C. MERIAM, D.M.D., HARVARD UNIVERSITY DENTAL
SCHOOL.

"Dentistry is a Specialty of Medicine."

[CONCLUDED FROM PAGE 491.]

THE MASSACHUSETTS MEDICAL SOCIETY is incorporated by the State.

"I. As health is essentially necessary to the happiness of society, and its preservation or recovery is closely connected with the knowledge of the animal economy and of the properties and effects of medicines; and as the benefit of medical

institutions. formed on liberal principles and encouraged by the patronage of the law is universally acknowledged." * * *

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Has the Massachusetts Dental Society a voice on these questions?

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"IV. No person being the proprietor of a secret remedy, or holding a patent relating to the requirements of dental practice, shall be a member of this society.

Has any American Odontological Society a voice on these questions?

Any liberal medical society would expel or debar from membership one who patented instruments, material, method or medicine. To disprove my words you must show that Drs. Williams, Bigelow, Hodges, Bowditch, Cheever and others have patent medicines and methods. Not what you and I *may think*, but what men like these *do* is to determine these questions.

* Name the medical school that is using patented methods or medicines; the professor or teacher in one who withholds any information or who is obliged to say, when asked by the students, that "he does not know, it has never been open for the

profession to learn; the medical authority or text-book that mentions patents or secrets except with contempt. Tell, when the delivery of instruments, invented by surgeons, has been prevented by threats of litigation or purchase. Can any of their makers boast that they own so many patents that members of the profession cannot put before their brothers improvements without their consent? Does the medical or any liberal profession march bound behind the triumphal car of a combination of its dealers?

A short time ago there met in the workroom of a maker of surgical and dental instruments, two specialists; one a surgeon, the other a dentist. The first could have made what he wished, where he wished, and how he wished, from all the appliances in medicine and surgery that his fellows had produced, the maker could carry out any order of his. But had the dentist ordered there all he needed, the maker would have had to say: "I cannot fill your order; those things are patented." Would a title of M. D. have placed the dentist on the same footing as the other?

At the last meeting of the Massachusetts Dental Society I called on Mr. Schmidt of New York to state how long he had been an instrument maker. He answered: "Twenty-six years." "In that time have you ever been obliged to refuse to make an instrument for a member of the medical profession because it was patented?" "No! Sir."

At my side are catalogues of large makers and dealers for the medical profession, and also the trades. The trade catalogues are full of patented articles of all kinds. The catalogues of medical and surgical instruments are not so marked in a single instance. How shall we rank *dental* catalogues? Where do they belong? With the trades or with the professions? It matters not now. But let us see to the future, so that, as any one of us may look back on his life, he shall not say dentistry has been with me a "specialty of medicine" "for revenue only."

APPENDIX.

A portion of this paper was read at the meeting of the Massachusetts Dental Society in Boston in June last.

It called out some reply which may be answered in part here.

That dentistry is three-fourths mechanical and should therefore be classed as a trade or mechanical art, not expecting to be governed by the other fourth which involves life and that calls for liberal thought and action by its members.

With this may be placed the curious interpretation that we are anxious to save the profit on our materials and methods and that the way to do this is to abandon ourselves wholly to trade, patent everything and form a co-operative company and thus "save money paid the dealers."

Also with this must be classed the statement that patents assist progress and that we are wrong to speak against them in the profession.

The answer to all these was contained in the paper. There is no complaint against patents or secrets in trade or business, but give up your titles of M. D., D. M. D., or D. D. S. and place yourselves where you belong. Do not claim the honors and emoluments of a liberal profession under false pretences. "If the Lord be God, follow him; but if Baal, then follow him."

Others claim that "men will not work without direct pecuniary reward or hope of such," when the whole history of medicine shows that the honorable position that the medical profession holds to-day is due to the fact that men have so worked. Agassiz said, when asked to lecture for profit, "I can not afford to waste my time in making money."

"Jenner¹ gave his inestimable secret, the result of twenty-two years of experiment and researches, unpurchased, to the public—when, as was said in Parliament, he might have made a hundred thousand pounds by it as well as any smaller sum."

¹From O. W. Holmes' Medical Essays.

In a paper before me I find casual mention of a physician who spent fifteen years in the investigation and study of one drug.

Those who think that the paper expresses only the personal opinions, or prejudices of the author and who can settle the question for themselves and perhaps others, by the statement that they do not agree with me, may do well to look over the extracts here given, as they speak with authority I cannot claim. I purposely limit them to Harvard teachers and Harvard men, as Harvard was the first university to establish a dental school and thus gave our profession the opportunity to place itself, if it will, by the side of law, divinity and medicine.

To deny that they apply to its dental school, the dental professors, instructors, students, the alumni and all the dental profession is to admit that dentistry has no right to be there.

PROF. JAMES W. WHITE, M.D.

To the Gentlemen of the Medical and Dental Schools:

* * *

"Fortunately, we can go but a little way in the study of any of the branches of natural science before that spontaneous and inevitable enthusiasm for the subject is developed which attends the true student through life. Nature rewards those who thus love and woo her, and this spirit abundantly. It is the most prominent characteristic of all eminence in science; it permeates the whole existence of the real masters and teachers of our art, and radiates upon all who come within their influence a kindred glow and devotion.

Recognize and cherish its first impulses in each other and yourselves, therefore. It will strengthen by encouragement, it may be killed in the bud by a laugh or a sneer. It is the fashion in some places to deride it and its manifestations, if they seem a little above or outside the ordinary worldly or practical motives of action and fashion is often mighty in such matters. It may crush out all the lofty and generous impulses in a generation, or in a com-

munity, or in a school of young men. But do you not be ashamed of enthusiasm. It has sometimes led men without a proper balance of intellect to do a foolish thing, but never an ignoble one. It is impossible to achieve in our art without it. Cultivate a spirit of enthusiasm for it therefore, and thus honor your manhood and the choice you have made. * * *

* * * There is no such contemptible spirit among students as this exclusive or preferred attention to such parts of their studies as seem to have a practical value. It exhibits itself in attendance upon the lectures relating to the practice of medicine or the hospital visit only, and in the production of the note-book only when the word treatment is mentioned or the formula of a recipe is given, and in the neglect of all that raises medicine to the rank of a science and its followers to be learned men. It degrades the art to the level of a mere trade. Such would be the spirit of one of a band of naturalists who, in regions unexplored by science, should spend his time in stuffing his pockets with grains of gold for future barter, while his companions were collecting the new and beautiful productions of nature's present work or the vestiges of the past lying about him, the possible and long-sought solutions of the grand mysteries of creation. I trust there is no one here who will entertain for a moment the unworthy thought of what is the money value of any information he may gain this winter. The truths we teach are worth knowing for their own sake, or they are not worth hearing.

With us must rest the responsibility of the selection of what is best to teach.

Have confidence enough in our judgment to receive as alike important whatever we offer. * * *

That our cities are not known and honored in other lands as much for distinguished physicians, as for their well-known men in literature and science, is our own fault alone, and the reason is we do not sufficiently honor our own calling. We labor mainly to acquire position and comforts, but how few of us are really students and care more for the advancement of science than for our own "getting on" in the world. * * *

In Germany the celebrated physician first makes for himself a name by incessant toil and self-sacrifice. He cares neither for society, for appearances, for comfort, only for science, and then in after years come riches and honors as well-deserved rewards.—*Introductory Address, Harvard, Nov. 2, 1876.*

REV. EDWARD EVERETT HALE, D.D.

“Noblesse Oblige.—”

But I will speak to men of the liberal professions, as one who has had a liberal education. To education in the liberal arts, in the humanities, our colleges are pledged, and our fraternity is consecrated. * * *

In daily life we may be hewers of wood and drawers of water; but we hew and we draw with a certain divine energy, and can make the humblest duty shine. * * *

In our country, in our time, it is the responsibility which rests on the men of liberal culture and of the liberal professions. For the men of liberal culture, of the liberal arts and professions—for the men who have had such advantage as the training of the higher humanities attempts to give—I say all these advantages demand of us special sacrifices in the public service; that we quicken as we can the public life; that we live as we may in a public spirit. *Noblesse Oblige!* Each gift that the past has given to us is pledge for our discharge of the common duty.

I. If I had no other reason for saying this, I should be tempted to make it the subject of my address to-day, because of the habit bred among persons who do not know what liberal culture is, of reducing all art, study, philosophy and religion to what Germans call bread-and-butter vocations. When the Saviour of mankind entered upon his work among men, the arch-tempter of mankind tried the first of devilish wiles upon him, by trying to persuade him to debase the life divine by some selfish miracle which should make bread for his own personal hunger. The same tempter offers the same temptation to each child of God this day. And in the several voices

by which the father of lies addresses men he tries to make them believe that according as they succeed in coining the divine gifts, or in exchanging for it bread, or palace, or fine clothing, or other personal luxury, in that proportion have their lives succeeded. * * *

Now, because this vulgar talk creeps into the journals and into general society, it seems fit to present the true purpose and motive of the liberal professions, and the liberal arts, in a meeting of men who are pledged to them. We are not hirelings in our service. *Noblesse Oblige!* The very privileges which are conferred upon us compel us to do our duty. * * *

II. What, then, are the distinctions between a guild of craftsmen and a guild of men of liberal training? What account is to be given of the distinctions which we enjoy as men of liberal culture and which we know that we enjoy? * * *

The historical distinction first to be noticed is that the professor, or the master of liberal arts, by whatever name he may be called, mediæval or of our own time, has no secrets in his calling. * * *

Thus the great distinction of the artists to whom we owe the birth of fine art in the middle ages is in the loyalty with which they taught all they knew. To surround himself with a staff of young and brilliant pupils, to work with them, to show them every process, to talk with them of every inspiration, nay, to intrust to their hands the execution of detail upon the canvas, this was the method of the enthusiasm of the great Italian artists.

Vasari says of Raphael that he never refused to any artist, though he were wholly unknown to him, his personal assistance in design or in execution of any work. * * *

III. The visible distinctions, then, between the liberal professions and the crafts or trades, are these two :

First. That the liberal professions have, and can have, no secrets in their methods.

Second. That men engaged in them are not paid, and cannot be paid, piecemeal for their endeavors.

And these two distinctions are enough to show that the es-

sential principle which lifts the liberal professions to their place above all other callings, is that they deal directly with infinite values. They deal with infinite life, or life in one of its infinite relations.

The callings of the teacher, the artist, the lawyer, the doctor, the clergyman, all assert their dignity because of this infinite element appearing directly in their endeavors. Can any other calling make the same claim? That moment there is another liberal profession, so long as that claim is true.¹

PROF. DAVID W. CHEEVER, M.D.

* * *

Medicine is not a trade, and if you make it one you will bitterly repent it.

It is not a calling in which to grow rich. It can never command the enormous income of the eminent lawyer even when the practice lies in a large and wealthy community, while the ventures and receipts of business men dwarf our year's earnings by one happy speculation or one large sale. If you seek for wealth you have mistaken your avocation. The majority of you will have a respectable livelihood after from five to ten years of waiting and poverty.

Add to this delay the outlay of your education and the return for your investment will be very small. * * *

For years, while you still trudge on foot, you will be covered with the dust of the charlatan, who rolls by you in his chariot. * * *

In spite of all this, the tide of students never ceases, and the profession is crowded with young doctors year after year.

What feeling calls them? What sentiment can sustain them in after-life? Money is not to be largely got. Practice alone is not enough. There must be something more and something higher.

That something is a love of your profession; a passion for science for its own sake, a broad humanity which covers all

¹A portion of the Commencement Address to Harvard Medical and Dental Schools in 1871. Afterwards incorporated in "What Career."

the sick with a model of charity. Hold fast to that love and to that science, if you would not sink from weariness in your earlier years, or find the fruits of success, but chaff, in your old age. Never lose sight of that motive, for if it once takes flight your profession is reduced to a trade and there absolutely nothing left.

As long as you can keep alive the sacred flame of this early passion which first called you to embrace the medical profession so long shall you be warmed, sustained, upheld amid disappointment, unjust treatment or reverses.—*Introductory Address to the Medical and Dental Schools in 1871.*

PRESIDENT ELIOT, of Harvard University.

In asking me, who am not a dentist, to speak to you, you have determined beforehand, for yourselves, the subject of this annual address. You doubtless thought that, as it is my duty to watch the condition and observe the methods of professional education in general, and to study the means by which the liberal professions have been recruited, organized and invested with dignity, my experience might enable me to make some useful suggestions concerning dental education and the means of improving the state of the profession of dentistry. At anyrate, these topics are the only ones which my training and occupation fit me to treat before a body like this; so that your expectation and my desire to be of some service, however slight, to the academy and the profession, both point to the same themes.

So young a profession as dentistry may well look in searching for means of exalting the calling, to the experience of the elder profession of medicine. It cannot fail to be observed that one of the things which makes the profession of medicine a liberal profession is the zeal for scientific research which animates their representative men throughout their lives. This admirable zeal to discover truth and to make it prevail, the profession of dentistry must emulate—indeed, already emulates.

In this zeal is to be found, on the one hand, evidence that

the profession is entitled to call itself liberal, and, on the other, security for steady growth and improvement. * * *

There is another common attribute of good physicians and surgeons which has had great effect to elevate and liberalize their profession—I mean their characteristic zeal for teaching. This zeal is manifested not only in giving direct instruction to medical students, but in imparting to medical societies and the public every important fact observed, every useful practice invented and every suggestive opinion or promising theory conceived.* The constant desire and purpose on the part of its members to teach, to impart to all any peculiar knowledge which each may require, is one of the principal distinctions between a liberal profession and a trade. *Dentistry would have no claim to be called a liberal profession, did not its practitioners manifest this zeal for teaching.*¹ In this respect a great change for the better has taken place in the profession during the past twenty years. * * *

Perhaps it seems to you, Gentlemen, that the measures which I have ventured to suggest, and the hopes which I entertain, are extravagant and visionary; but let anyone, who doubts about the progress which the near future has seen accomplished.

We would not ask more than this, that the progress of the next ten years may equal the progress of the last ten.

Of the changes in dental schools which I have advocated, the larger number have been already in part introduced, and the rest have to be thoroughly proved in the schools of the kindred professions of medicine. The other means of elevating the profession which I have mentioned are not untried; on the contrary, their value has been demonstrated in the actual experience of other professions. Does it seem to any of you that the best part of your professions has no weapons with which effectively to attack abuses intrenched behind the self-interest of the few who profit by them?

Let me assure any such doubters that public discussion is a

¹Italics my own.—H. C. M.

weapon very formidable to those who for selfish ends maintain abuses or resist improvements. Instructed by the professions of law and medicine, let us confide in the power for good of the public sentiment of the profession, expressed in societies like this, in dental journals, and in daily conversation, and reinforced by the informal opinion of the educated public.—*Address before the American Academy of Dental Science, Boston, Oct. 30, 1878.*

HON. JAMES RUSSELL LOWELL, LL.D.

The motto first proposed for the college arms was, as you know, *Veritas*, written across three open books. * * *

The motto finally substituted for that, *Christo et Ecclesiæ*, is, when rightly interpreted, substantially the same for it means that we are to devote ourselves to the highest conception we have of Truth and to the preaching of it. * * *

Let the humanities be maintained undiminished in their ancient right. Leave in their traditional pre-eminence those arts that were rightly called liberal; those studies that kindle the imagination, and through it irradiate the reason; those studies that manumitted the modern mind. * * *

Give us science too, but first of all, and last of all, the science that ennobles life and makes it generous.—*Oration on the 250th Anniversary of the Foundation of Harvard College.*

EQUIVALENTS.

BY W. IRVING THAYER, D.D.S., M.D., BROOKLYN, N. Y.

Where does that man hold office, to practice dentistry in, who pays rent, feeds the hungry, clothes the naked, and confers untold blessings upon his fellow man, all for the sake of doing good? Where is he located?

What earthly object has he in spending his hours, days, weeks, months and years in the practice of dentistry? What end can he have in view? Some, we must say, have none.

The majority have this end in view, to wit, to provide for

themselves and those dependent upon them. 'Tis well! Do all do that? No!

Do all dentists pay their debts? Do all dentists receive their just dues for services rendered? Do they? Think!

It is the rule with the public to pay the doctor and dentist the last, if, indeed, they are ever paid. We "know a man, whether in the body or out of it, we know not," who has now standing out over seven thousand and five hundred dollars of unpaid bills. He ought to be out of the body to allow his bills to accumulate to so great an amount, even if they covered a period of fifteen years. 'Tis true that all will make some poor debts, and can't help it; but, did it ever occur to the reader that the dentist could by any means be to blame? Did it? We do not care who the party is—the exceptions are rare—who will voluntarily go and pay a bill to his doctor or dentist. Rare, indeed! Yet there are cases. Few though!

The inquiry has been made if either the dentist or physician could by any possible means be to blame? We answer yes!

Blamed for what? To blame because his bills are not paid. Who ever thinks of going to one of the large dry goods stores in Boston or New York and making a purchase of sixty or a hundred dollars' worth of goods, pack them away under his arms, and say to the clerk or proprietor: "Send your bill in, and I'll attend to it in a few days?" Who does this, and especially if he be a stranger? As Dr. E. Parmly Brown says, "he'd be nabbed instanter!" Try it on Tiffany & Co., and see how far the would-be purchaser would proceed on his journey. Not far!

Dr. Brown says: "But here they can come into your office, or mine, and obtain three or five hundred dollars' worth of dentistry and say: 'Send your bill in doctor.' And sometimes you've sent 'your bill in,' and you have sent and sent until you have sent yourself into a hole! Who's to blame?"

I answer you, reader! And everyone who practices dentistry! And, you physicians, too!

If there are any bills on earth that should be paid first, it is for the services of the dentist and physician.

These two professional men above cited have not, as two classes, given their patients to understand in no unmistakable terms that the first duty of said patients is to pay for such services immediately on receipt of the same.

The remedy is in the hands of the dental profession in and through their organizations to formulate a code that has some reasonableness to it, that will compel each patient to fulfill their end of the contract as faithfully as has the poor dentist !

It can be done ! Don't laugh and scout the idea. If the best men of the profession will resolve that they will frankly and firmly inform each patient that from December 1 in the good year of Our Lord 1887 all of their operations are cash, and mean it and practice it, they can have their pay as soon as they have finished their labors.

I "know a man," and he is "in the body," too, who has hung up in front of his operating chair these words in beautiful crimson and gold :

TERMS :

Positively Cash on Completion
of each
OPERATION!!

And he gets the cash, then and there !

The profession as a whole, and, perhaps with this exception, haven't got backbone enough to take such a stand and maintain it with dignity and courtesy.

This bold bad man who is such a crank as to have placed before his chair such a notice as that has assured the writer that it does work perfectly and smoothly, and a patient never gets out of his chair without immediately paying that "bold bad man" his fee, so justly due, THEN !

It never reverts back on a man who does right. He can't lose any truly good patients by saying to them, by and through that sign, "I, by force of circumstance am compelled to pay my butcher, my baker, my grocer and candle-stick maker ; for, he that is wiser and better than I am, has issued

this righteous edict." "By the sweat of thy brow, shalt thou earn thy bread!" "And, farthermore, my dear patient, I am blessing you with every throb that pulsates through my sacrificing brain. It is but just that I should receive from you as prompt an equivalent.

Can it be supposed for one moment that that being who has had intelligence enough to come into your bower to have you bless, can be so far demented, so lost to reason, so uncivilized, so graceless, so godless, as to conceive for one brief moment that you are not entitled to your equivalent, *then* and *there*, without the lapse of ages, and then when time is no more, to require your collector to get down upon his knees and sue in a craven and humiliating manner, for your just equivalent?

Have you got backbone enough to place that sign before your chair, and help yourself and every brother dentist with whom you are so intimately connected? Have you?

ONE WAY TO FILL TEETH WITH AMALGAM.

BY DR. L. WEST, MARIONVILLE, MO.

In filling molars and bicuspid on their proximal surfaces with amalgam it is often difficult to get sufficient groove or retaining pit to securely hold the filling, and many times we are not satisfied to leave the cavity so, and yet we do not wish to waste so much tooth substance as would be necessary to have better retaining points.

To overcome this I cut the fissure along the grinding surface of the tooth and enlarge it at the end farthest from the cavity; also slightly undercut the fissure making a good retaining pit out of the fissure.

This will frequently be found necessary because of decay.

Then I take a double-headed platinum pin similar to those used by the manufacturers of artificial teeth except larger, and after partly filling the cavity with the amalgam I place the pin

in the fissure so that one head will rest in the enlarged end of the fissure and the other in the center of the main filling in the side of the tooth.

Now fill the cavity as usual and you have a better retainer than any groove that could be cut in the margin of the cavity.

Of course, retaining grooves or points are necessary at the bottom of the cavity.

THE TEETH AND THE NERVOUS SYSTEM.

DR. GEO. B. CLEMENT, MACON, MISSISSIPPI.

If, as the "good book" says, "man was first made in the image of his God," we find him to-day a degenerate simile in physical, as well as in moral status, of the original.

We often hear it said: "Everything is perfect which subserves the end for which it was made." If so, we seldom see a perfect physique. Each tissue in the human organism has degenerated until not one comes up to the proper standard of "perfection." The teeth, though formed of the hardest substance, are nevertheless imperfect and degenerate.

We are often asked to explain the cause of decay in teeth. Why did our fathers and fore-fathers have better teeth than we of to-day? Now it is a task to explain the cause, even as we understand it, to the satisfaction of the "average American citizen."

We hear of the acid theory on the one side, the germ theory on the other. This will do very well for science to debate, but what can we say to our patients?

What theory can we give them, and explain, so as to treat from a first cause?

I am satisfied that we are in error and doing very little in the way of "preventive dentistry."

We seldom look for the original cause, but treat present symptoms. We should be plain with our patients and point

out the cause, let it be what it will. If we fill a tooth at the proper time, and with the proper material, we save the tooth. The same we might say of every operation performed, yet we do very little toward "preventive dentistry."

From an original, and specific cause, or causes, mankind has been cursed with secondary and tertiary maladies. These maladies have reduced the powers of resistance in the physical man, and he is now subjected to influences deleterious in their nature, and is wholly incapable of resisting the same.

These influences are secondary causes which lower the standard of life force, and consequently weaken the action of individual organs, which lessens the resistance and finally prevents the perfection of any, and all the tissues which go to make up the human organism.

We have five systems in the organization of man to compose the whole.

The nervous, the muscular, the vascular, the ligamentous and the osseous. One of these is dependent upon the other it is true, but the combined action and associated effort of the whole is subject to and depends on the normal action of the mighty nervous system. It is through this system the mysterious "*vis vitalis*" sets in play the action of each organ which performs its individual function in obedience to mutual dependence.

Nine times out of ten decay in the human teeth is the result of original imperfection in the primitive formation of the tooth structure. This want of original perfection is the result of non-assimilation. The non-assimilation is the result of perverted nutrition, and the perverted nutrition is a result of an impaired or impoverished nervous system. The impaired nervous system is the result of the "specific cause" before mentioned in the first part of this paper.

It is "the sin of the father visited on the children throughout (it may be) the third and fourth generation."

As a first cause, we only mention syphilitic virus and scrofulous taint with results.

A father contracts syphilis; it impairs and impoverishes his

nervous system. In the same condition we inherit the same nervous system; in the same condition we carefully transmit and hand it down to our children's children.

Under these circumstances can we expect to improve the fearful condition of the human teeth without the aid of constitutional treatment and co-operation of our medical doctors with that of the people at large.

In my practice I see traces of that fearful disease, syphilis, in the mouths of bright-eyed little boys and girls every few days. They are innocent of the inherited poison, which day by day weakens and destroys the vital force required to complete and make "perfect" the man or woman of future years.

It is a curse to humanity, a shame to civilization and a well-defined case of inherited syphilis brought out and manifested in the teeth of children, should be fully explained to the parent as a first cause of premature decay and bad teeth in the child.

I have under treatment a family of little boys and girls—six in number. It is a sad sight to see "the sin of the father" visited upon those innocent little ones; yet this is so, and I too well know it to be the case with every practitioner of dentistry. Then let us be plain. It is not acid, nor is it germs, that decay the tooth by the time it is erupted.

It is not acid, it is not germs that fashion the notched teeth, the soft, white chalky teeth, the irregular and unsightly teeth. It is the earlier indiscretion of fathers and mothers.

The causes which go to share in the dethronement of the nervous system, are too numerous to mention; but let these be what may, all have played their part, and to-day we see it not in the bad teeth alone, but every feature and tissue of the human organism.

The mothers are lacing, dancing, flirting and in a way modestly yielding up their "good health" to pleasures of an intemperate dissipation.

The fathers are drinking, smoking, chewing, degrading the sacred ties of "wedlock," thus contracting the filthy diseases, which they transmit to the offspring.

Is it not time to be plain?

Then let us do away with so much about acid and germs and tell the sad truth when little, delicate, sickly children are brought before us with teeth beyond the treatment of skill.

This article to some few may appear offensive, but I tell you, my brethren, it is defensive and sooner or later all will see the fact as laid down herein.

"A THIEF IS A THIEF, AND NO OTHER NAME
FITS HIM."

BY C. W. MUNSON, D.D.S., TOLEDO, OHIO.

Under the above caption the editor of the *Western Dental Journal* (Aug., 1887) slashes the "shysters" in the manner following: Beginning with the familiar quotation from Shakespeare, "Who steals my purse steals trash," etc., he quotes from the *Dental Review* a communication from Dr. P. J. Kester, of Chicago, upon "Bogus Amalgam," and assumes (though he admits Dr. Kester does not say so) that the amalgam in question "was the production of some one of these 'shysters,' who, under the guise of working for the interests of the profession, as opposed to monopoly, have succeeded in loading them (the dentists) down with immeasurable quantities of their vile compounds." "These shysters," he goes on to say, "do not pretend that their amalgams are genuine (the result of their own experiments, we suppose he means), but that they are all made by formulas resulting from expert analyses of the several reputable and established brands now upon the market, and consequently containing the same elements and possessing the same meritorious qualities." "This claim alone," he declares, "ought to be sufficient to damn them in the eyes of every intelligent, conscientious dentist in the world." "No man can expect to succeed in life by tearing down his neighbor: no man of honest purpose will attempt it, and no right-minded person can find excuse for aiding him in it."

There is more, but enough is given to illustrate his mild manner of treating the subject, and how well he lives up to his fine sentiment in regard to "tearing down his neighbor."

Assuming that Dr. Kester referred to certain persons (though he frankly admits the doctor "does not say so" he denounces them, with a virulence which is only equaled by the fulsome commendation bestowed upon those individuals whose "reputable and established brands" and "well-earned" reputations, he holds, should entitle them to our gratitude and regard. He declares that the claims set up regarding an "expert analysis" are altogether false and unworthy of credence.

Upon what grounds he bases this opinion is best known to himself; that they are not denied by the owners of these "well earned" reputations is certainly significant.

That there are "shysters," who seek to impose upon dentists, worthless amalgams and other materials, is too true to be denied—that so many of them are to be found within the dental profession is matter for regret, and were his denunciations leveled at this class alone, we could and should most heartily indorse him.

To show that in the present instance his anathemas are hurled at the real friends of the dentist, while the shysters receive his commendation and support, is the object of the present paper.

There are at the present time not less than seventy amalgams and alloys in the market. Of these, some are made and sold by dentists, or placed by them in the hands of dealers; the greater number being made and sold by the manufacturers themselves. With a single exception (Townshend's amalgam) both their composition and the methods of preparation is the secret of the inventor and his principal stock in trade. Each one of these alloys, it is claimed, possesses certain peculiar qualities, which render it superior to all others. Thus, for one is claimed, "better edge strength;" a second is, "quicker setting;" a third, "will not discolor;" a fourth has "no shrinkage," and so on. These claims will be better appreciated when it is understood that each one has the same general composition as all the rest. Tin and silver compose from 90 to 95 per cent. of these vaunted amalgams. To this is sometimes added a very small amount of copper, zinc or cadmium (one or

all) the amount rarely exceeding two per cent. of the alloy.

The "gold and platinum" alloys are so named, it would seem, to impress the dentist with the idea that he is using the precious metals in this form, and to reconcile him to the increased expense; since the limited amount of these metals used (of gold from one-half to five per cent. of platinum in most none) would in itself hardly justify the nomenclature.

In alloys where other metals are substituted in somewhat larger proportions, we hear of no high-sounding titles, such as "copper and zinc," or "cadmium and copper" alloy, as the case may be; amalgam, plain and simple, answers excellently well, with the added claim that it excels all others.

Only one dealer, to our knowledge, has the grace to state that when the price at which it is sold is considered, no large proportion of either gold or platinum could reasonably be expected to be found in it, but it is naively added that it contains as much as others of the same grade.

To the enterprise and push of one, and so far as we are aware, only one of these "shysters" do dentists owe their present knowledge of the composition of the various amalgams used.

Desiring to make an amalgam which should equal or excel anything in the market, he sought to discover the composition of the most popular among them. Failing in other methods, he at length resorted to quantitative analysis as being the only definite method of information.

The result proved two things: First, that the formulas of most of the different amalgams and alloys differed but little in the proportions of the two principal metals used in their composition. Second, that however little the difference, each one claims to excel all others.

Presuming that such a revelation would be welcomed by dentists generally, this "shyster," at his own expense, placed in their hands a list of the most popular amalgams with their formulas.

These formulas being the stock in trade of the men of "well earned," reputations it is naturally to be expected they would

not feel kindly toward the man through whose researches their well-guarded secrets were revealed.

To our surprise the proprietors of these formulas, with a single exception, have maintained a notable silence, and so far as any satisfactory explanation is concerned, he would have done wisely had he profited by their example.

In conclusion, we will add this simple prediction: Wherever, among dentists truth, intelligence and knowledge are preferred to ignorance, deception and empiricism, the "shysters" by whose researches, deception and humbug are revealed, will occupy a position far above those who by any secret methods whatever lend aid and encouragement to empiricism.

"A thief is a thief," not more so when he stealthily appropriates another's property than when by duplicity and misrepresentation he succeeds in accomplishing the same result.

To those who use a saliva ejector (and every dentist should), let me say attach a fresh pure glass tube for every patient, so ceremoniously that it shall be seen by them. * It will be appreciated. If there are any who use the metal tube manufactured for the ejector, let him eject it and substitute glass perforated on the sides of the round end and not on the end. It is much more comfortable for patients, and works better. To clean these tubes, drop them into a covered glass vessel containing dilute nitric acid, they may be kept immersed in it and merely washing the acid away they are ready for use. The tube can be cleaned perfectly in this way in a moment. BOWMAN.

IN REGARD to the preparation of the interior of the cavity, the walls being properly cut away, the cavity must be formed so as to hold the fillings secure, a little larger on the inside than at the periphery. * It requires our best judgment to determine in each case how to make our best undercuts and pits. No set of rules can be laid down to govern the operator in all cases-

DR. J. B. MONFORT.

SOCIETIES.

TREATMENT OF PULPLESS TEETH.¹

BY HENRY FISHER, D.D.S.

The proper treatment of pulpless teeth is a question of the utmost importance to every dentist, and I have hastily prepared a short paper on this subject to present to you this evening, not with the expectation of presenting new thoughts, but with the view of bringing it before you for discussion.

The subject in detail embraces too large a field to discuss in a single paper. I shall therefore present only a few of its special phases. First, the consideration of cases in which the teeth are in the following condition :

- a.* Sound teeth in which the pulp has died.
- b.* Teeth in which the pulp has died under a filling, in good condition.
- c.* Decayed teeth in which the pulp has died, but in which the pulp chamber, has never been opened.

In many of the above classes of cases, I should not disturb the condition by attempting to open into the pulp canals. If the tooth has been in this condition for a length of time, has always been free from pain, and shows no signs of irritation or inflammation, the patient having reached the age of maturity, I would let the pulp cavity alone, but in the majority of cases it is best to open into the pulp chamber, and fill the root canals.

Having made the opening, great care is required, regardless of the apparently healthy condition of the parts, not to excite

¹Read before the St. Louis Dental Society.

an acute inflammation, as such teeth are much more liable to become inflamed than when the pulp cavity has been open for a length of time. The use of carbolic acid, creasote, or other irritating agents should always be avoided. The cavity should be cleansed with warm water, the peroxide of hydrogen should be gently carried into the canals on a fine broach bearing a few fibers of cotton; no force should be used, the peroxide should be continued so long as any bubbles appear. Too much care cannot be taken to prevent any septic matter from being carried through the apex of the roots, as this is undoubtedly the cause of the inflammation so likely to be excited and so much to be dreaded in these cases. After the canals are cleansed they should be dried, and cotton moistened with a $\frac{1}{1000}$ solution of the bichloride of mercury should be placed in the pulp chamber and canals, the excess of the solution removed with a piece of spunk or bibulous paper, then sealed up with cotton and sandarach varnish. After the lapse of two or three days, the dam should be applied, the dressing removed, and, if the cotton in the canals is found to be reasonably dry, showing no signs of the presence of lymph or pus, the canals should be permanently filled, the sooner the better.

When the tooth presented, has a cavity with the pulp chamber open, the canals should be cleansed in a manner similar to those already described, after which the treatment should be somewhat different.

In all cases of open canals there is always more or less secretion through the canal from the tissue at its apex. This secretion may differ in character and quantity; it may be serum lymph, or pus. It may be so small in quantity as to be scarcely noticeable, or it may be copious enough to soon fill the canal.

The treatment should be antiseptic and stimulating. A five per cent. solution of carbolic acid, iodoform, oil of cloves, peppermint, cinnamon, or other similar agents may be used, but the canals should not be sealed up; cotton should be placed loosely in the cavity of decay; in a day or two, the treatment may be repeated; and if no inflammation has been excited, the cotton dressing in the roots may be sealed with cotton and

sandarach. In this class of cases all powerful irritants, such as carbolic acid full strength, or 95 per cent. should never be used. In this connection I will not discuss immediate root-filling.

The treatment of teeth having an abscess with a fistulous opening generally requires a little more time.

The abscess should be thoroughly cleansed by the free use of the peroxide of hydrogen, then stimulating and antiseptic remedies should be used. Carbolic acid or creasote is the favorite remedy of many dentists, who use it full strength, forcing it through the canal until it appears at the external opening.

I do not favor such treatment until milder remedies have failed, and milder treatment seldom does fail, leaving the tissues at the apex of the root in a better condition, less liable to a recurrence of the trouble. If the discharge of pus is persistent, a solution of the chloride of zinc ten grains to the dram of water, is an excellent remedy; peroxide of hydrogen should be used at the beginning of each treatment.

The filling of the roots after they are in a condition to be filled is of the utmost importance. If the canals be perfectly filled to the apices there is little or no danger of a return of the abscess. I might almost say there is no danger.—Dr. Louis Jack says: "Careful management followed by complete closure of the canals is rarely followed by any after inflammation of the root-membrane, and if it should occur, it is amenable to treatment."

Alveolar abscess is caused by septic matter infiltrated through the foramen at the apex of the root: if the canal be thoroughly filled, preventing the passage of the septic poison there can be no abscess. I know that this is a debatable question and I formerly held different views. Many dentists hold, that when the pulp is dead, the vitality of the tooth is lessened its nutrition impaired, and to use a popular expression. "Cold is likely to settle in the tooth, and abscess result." If abscess is caused by septic matter passing through the root, then it is

our duty and privilege to almost entirely prevent such unfortunate and painful results.

I believe there is no operation in dentistry, that is performed more carelessly or imperfectly by the average dentist, than that of filling the roots of teeth, provided their aim is to place in the canal a solid filling. I know some thoughtful men in profession who do not believe in filling the roots of teeth, or at least only with a little cotton or wool. To fill the molar teeth thoroughly, sufficient pains are not taken to open up and fill the small canals, and to cut away enough of the tooth to permit successful treatment.

Gutta-percha dissolved in chloroform is generally admitted to be the only method of filling the canals that can be relied upon to thoroughly fill the smaller ones. This agent followed by cones of gutta percha, or in the small ones, cones of wood or gold, leaves nothing more to be desired for a root filling material.

CONNECTICUT VALLEY DENTAL SOCIETY.

HOLYOKE, MASS., Nov. 18, 1887.

At the annual meeting of the Connecticut Valley Dental Society held at Springfield, Mass., October 27 and 28, the following officers were elected:

President, R. R. Andrews, Cambridge, Mass.; Vice-Presidents, F. W. Williams, Greenfield, Mass., Geo. W. Lovejoy, Montreal, P. Q.; Secretary, Geo. A. Maxfield, Holyoke, Mass.; Treasurer, W. F. Andrews, Springfield, Mass.

GEO. A. MAXFIELD, D.D. S.,
Secretary.

DR. SAUNDBY says that the styptic taste of tincture of perchloride of iron may be disguised by administering it is sweetened milk. This mixture has the further advantage of not affecting the teeth.—*Ex.*

TRANSLATIONS.

DEVITALIZATION OF THE DENTAL PULP.

TRANSLATED BY H. MUETZE, FROM *L'Odontologie*.

Dr. Kuhn says, that he has been using for the last 25 years an arsenical paste, the action of which is painless, rapid and energetic, never causing any trouble in the tooth itself after application. It consists of a powder and liquid, which may be prepared extemporaneously for each application. The following are the formulæ:

POWDER.

R _y	Powd. charcoal	-	-	-	-	10 grammes.
	Arsenious acid	-	-	-	-	3 "
	Mur. morphine	-	-	-	-	1/2 gramme

Mix.

LIQUID.

R _y	Creasote	} equal parts.
	Ess. cloves	

Apply it with the necessary care, and never allow it to remain in the tooth longer than 24 hours. After 6 hours the nerve is totally destroyed. In some cases a second application may be necessary, but very rarely a third. On favorable cases extirpation of the nerve and filling of the root may be accomplished the same day. The extirpation of the nerve fibres is generally painless; in case of sensitiveness however, an application of creasote will facilitate extirpation at the next sitting. Judicious application of this paste never results in periostitis.

PRESERVATION OF ALKALOID SOLUTIONS.

Solutions of cocaine, morpine, atrophine and other alkaloids, when prepared with distilled water very soon become infested with different organic growths.

Dr. Abbott, recommends the use of camphor water. He preserved a solution of atropine, to which he added $\frac{1}{2}$ grammes of camphor for every 30 grammes of liquid for a year, without noticing the development of micro-organisms. According to Dr. Tichborne, of Dublin, the salicylates of the alkaloids may be employed, the solutions of which do not irritate and produce no fungous growths.

A CASE OF REPLANTATION.

TRANSLATED BY H. MUETZE, FROM *L'Odontologie*.

On the third of January 1886, a girl, 18 years of age, called at the Ecole dentaire, of Paris, complaining about her first right upper bicuspid tooth, which was very badly decayed and besides affected with chronic periostitis. This tooth had been previously filled in May 1885, but the filling had not proven successful, it had come out. The root canals were open and dentine was exposed to the destructive action of the saliva and therefore softened. The tooth had been in this condition for six months. In spite of all the treatment, which was subsequently applied, the tooth still ached, after a month had elapsed.

As the girl insisted upon having the tooth preserved, replantation was suggested to her, and she consented to undergo the operation. The tooth was extracted; the roots, two in number, were at the extremities entirely deprived of the periosteum and even partly necrosed. The palatine root was perfectly

straight, the labial root, however, had a curve at its apex. As soon as the tooth had been extracted, the socket as well as the tooth were carefully cleansed with alcohol and carbolized water. The cavity and canals of the tooth were properly prepared and filled with Poulson's cement.

The diseased parts of the roots were removed, and after the tooth and alveolar cavity had been thoroughly disinfected, the tooth was replaced. The operation required twenty minutes.

In order to retain the tooth in its proper position a new method was followed, which has been recommended by Dr. Herbst, of Bremen. It consists in the application of the rubber-dam. A small piece of rubber-dam, about 5 cm. square was taken and two holes punched into it, leaving enough space between them to stretch it over the replanted tooth. One hole was slipped over the second bicuspid, next to the replanted tooth and the dam fastened with a ligature. Then the dam was stretched over the replanted tooth, fastened as before on the canine and the excess of dam trimmed off. In this way the dam is held in position by two sound teeth; it has two fixed points, which hold the replanted tooth in the socket by a constant pressure.

A week later, the patient came back to the clinic and upon examining the mouth, it was found, that the gums were in a perfectly healthy condition, and although the tooth was a little loose yet, it still was firm enough to allow the rubber dam to be taken off. On pressing on the grinding surface, however; a little pain was perceived. Another week afterwards the tooth was entirely non-sensitive, the articulation normal, only mastication was not perfect. The patient was advised, not to chew on the right side, to prevent inflammation.

Three weeks after the operation, there was no perceptible pain caused by pressing on the grinding surface. The tooth was firm and the gums did not show any signs of inflammation.

Now, on the 20 of December, we have the satisfaction of being able to state, that the replanted tooth is just as firm, as any tooth in the patient's mouth.

CORRESPONDENCE.

TOOTH CROWNS AND BRIDGE WORK.

November 1, 1887.

A. L. Northrop, D.D.S.;

DEAR SIR:—In answer to your request on behalf of First District Dental Society of New York, asking for our opinion as to the legal position of the dental profession, with regard to the crown and bridge patents of the "International Tooth Crown Company," in view of the recent decision of Judges Wallace and Shipman, in the Richmond and Gaylord suits, and advice as to relief from further claims made under the Low bridge patent, we have to say.

These suits involved the validity of the two patents to Cassius M. Richmond, Nos. 277,941 and 277,943, for "Tooth Crowns, etc.," the patent to Alvan S. Richmond, No. 277,933, for "bridge" all dated May 22, 1883, and the patent to James E. Low, for "method of supporting artificial teeth by bands cemented to permanent teeth," No. 238,940, dated March 15, 1881.

The first two patents covered what is known as the "Richmond" and the "Sheffield" tooth crown in all its varieties. They were held invalid, and therefore you are at liberty to make such tooth crowns without being in any way liable to the International Tooth Crown Co.

The complainants have appealed this case to the U. S. Supreme Court, but we do not advise you that any different decision will probably result. The practical result is that the tooth crown is free.

The patent for the Richmond bridge was also held invalid,

but the Low patent was declared to be good. This Low patent covers a bridge attached to continuous bands cemented to adjoining permanent teeth, "whereby said artificial teeth are supported by said permanent teeth without dependence on the gum beneath."

The Richmond patient is, as you will remember, for a bridge supported by caps, and the Court held that it was not invention for Richmond to support a bridge on caps, but it was invention for Low to support a bridge on bands, taking all the surrounding circumstances into consideration, and that as a cap was nothing but a band with a roof on it, the Richmond bridge infringed the Low patent.

The practical effect of this decision, if the complainant chooses to follow it up diligently, and unless some new evidence is found, will be to shut the profession out from inserting permanent bridges supported at one or more points by cemented caps or bands without dependence on the gum.

As the matter now stands, any dentist inserting a Richmond bridge (according to the decision), infringes the Low patent; and an injunction would doubtless now be granted by any Federal Judge on application, on the strength of that adjudication alone.

An appeal can be taken by the defendants to the Supreme Court, a year or so hence, after an accounting by them, and determining the amount of profits or damages the complainant is entitled to recover.

The way of relief is for all the dentists of the United States, who supported artificial teeth on a band or bar, surrounding and extending between permanent teeth prior to September, 1878, to send to us at No. 833 Broadway, New York City, or to No. 9 Law Chambers, New Haven, Connecticut, a truthful description of what he did, and for whom, and where and when.

If such proofs can be made strong and clear enough to satisfy the Court that what Low described was well known, and had been long practised by dentists in the United States before Low claims to have done it, the present case might be opened for re-hearing on the newly-discovered evidence—or the Courts

might refuse to grant injunctions, upon the ground that the present decision would have been the other way if this evidence had been before it—at any rate, the question of the validity of the Low patent would be re-tried, if its owner ever had the temerity to sue a dentist whose mouth had not been closed by a license, in which he covenanted never to deny its validity.

Whether, in a suit against such a licensee, the Court would enjoin upon the *covenants*, under a patent declared void, either before or after the taking of the license, we cannot say.

Your obedient servants,

SOLOMON J. GORDON,

833 Broadway, New York City.

JOHN K. BEECH,

9 Law Chambers, New Haven, Conn.

AN INTERESTING CASE.

EDITOR ARCHIVES.—On the 24th of November Dr. E. H. Gregory, of this city, performed an operation at the Sisters' Hospital, for a young man eighteen years of age, of Paynesville, Mo., who, when but five years of age was salivated so that the masticating muscles of the left side were destroyed, and which on healing caused a cicatrix which produced *Traumatic Trismus*.

During the intervening thirteen years this cicatricial tissue has been broken up three times in hopes that the young man would be able to use his jaw in mastication with the aid of the muscles on the opposite side, but each time the cicatrix has produced the same result. With the view of making a new joint to afford the patient the use of the right side for mastication, the doctor on the above date removed a portion of the inferior maxillary bone anterior to where the cicatricial tissue had formed, corresponding in size with a line drawn at the middle of the root of the first inferior bicuspid and the anterior root of the first inferior molar, or about one-half inch.

On the following Sunday morning, the 27th inst., I placed in the space made by the removal of the piece of bone, a piece of vulcanized rubber about double the thickness of rubber used for dental plates, with the idea that by the pressure of the two ends of the bone it would be held in position, but when I called the following day I found it had slipped out of position, owing, I think, to the two ends of the bone forming a sort of dovetail; and in using the jaw as the young man informed me he had eaten a piece of beef-steak, and some bread and butter.

I then removed the piece of rubber and drilled a small hole near the top large enough to admit a piece of gold wire. I then twisted the wire for a little over a quarter of an inch until it would reach from the rubber when in position to the posterior surface of the left inferior canine. to which I then attached the wire.

The young man called on me during the afternoon and it was nicely held in position by this simple arrangement, and in using his jaw the rubber being attached to the movable end, it moved with it.

H. L. McKELLOPS, M. D., D. D. S.

CHICAGO DENTAL SOCIETY.

A very interesting meeting of the Chicago Dental Society was held Tuesday evening, Dec. 13, at the Central Music Hall. After some routine business Dr. Swain read a paper on "Closure of Lessions of the palate." Discussed by Drs. Brophy, Black, Case and Gilmore. We feel proud of this society which has a membership of over eighty, and of unsurpassed quality of talent. There are also three other societies—one of which has very fresh young blood—may it become equal to its mother. The clinic of the 14th opened early in the morning and continued all day. A great number and variety of operations were skilfully performed. Some very interesting casts of irregularities were exhibited. Clamps and Mattrices, electric appliancces, etc., were shown. The day closed with a grand banquet at the Richelieu, which was enjoyed by about eighty

members and guests. Their twenty-fifth anniversary will be celebrated next year—on an appropriate scale—whorthy of our progressive suburb, which always does us honor.

M.

MONTHLY LIST OF PATENTS for inventions relating to dental interests, for the month ending Nov. 25, 1887. Reported expressly for the ARCHIVES, by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C. Advice free.

372,400. Dental burring-tool—A. W. Browne, Prince's Bay, N. Y. 372,397. Dental engine—W. G. A. Bonwill, Philadelphia, Pa. 372,317. Dental engine—W. A. Knowles, Alameda, Cal. 373,141. Dental engine—W. A. Knowles, Alameda, Cal. 373,079. Dental engine—W. B. Mann, Baltimore, Md. 373,302. Artificial tooth—J. J. R. Patrick, Belleville, Ill. 373,099. Artificial tooth—E. H. Sherman, Grand Rapids, Mich. 373,346. Artificial tooth-crown—George Evans, New York, N. Y. 373,347. Manufacture of artificial tooth-crowns—George Evans, New York, N. Y. 373,348. Manufacture of artificial tooth crowns—George Evans, New York, N. Y.

DISLOCATION OF THE JAW FROM VOMITING.—Dr. Curtis reports in the *Medical Press* the case of a young woman whom he was called to treat for double dislocation of the jaw produced by the act of vomiting.

C.

THE AMERICAN DENTIST IN ENGLAND.—The London correspondent of the *Times* writes: "The American dentist has become almost as fixed an institution in England as the French hairdresser or the German waiter. There are probably two score in London alone, commanding a patronage which would open the eyes of their professional brethren at home. I think dentistry is probably the only thing in which Englishmen would unanimously concede American supremacy.—*Medical Record*."

EDITORIAL.

PUBLISHER'S VALEDICTORY.

TO THE EDITORS, COLABORATORS AND SUBSCRIBERS :

With this number I cease to be the publisher of the ARCHIVES—however, not without feelings of appreciation of your co-operation and patience, for which you have my cordial thanks, and I bespeak for my successors, the progressive dentists of the different states, your hearty support.

It affords me pleasure to be able to say that during all the years in which I have published the ARCHIVES there has been no time when the literary work gave such general satisfaction as it has during the past year.

Having an editor (in fact, and not simply in name) in each state, thereby giving the dental news in brief of all the different states, cannot be otherwise than interesting and instructive, dispensing with lengthy, prosy papers which but few of the profession have time or inclination to read, the advertisers as well as the practical dentists will readily perceive the ARCHIVES is no longer a local journal (although published in St. Louis), but is the journal of each of the respective states, and if the present year is any criterion to judge of the popularity of this method of securing literary work, the ARCHIVES will have a circulation of over ten thousand within the next two years.

The reader may ask why I do not continue the publication, in reply, permit me to state that, being the

publisher of four medical journals, *The Weekly Medical Review*, *Courier of Medicine*, *Annals of Surgery* and *The American Journal of Ophthalmology*, as well as many medical books, my business therefore is almost exclusively with the doctors of medicine, and I find it to my interest to confine myself exclusively to my medical publications.

All Subscribers and Advertisers for 1888 and future years will remit to my successors, those owing for 1887 or prior will please remit amount to me at once as I am now desirous of closing all outstanding accounts for the ARCHIVES.

The patrons of the ARCHIVES will please remember that financial success depends largely on the prompt payment of subscriptions in *advance*. To be able to furnish a first-class journal exclusively for the benefit of the profession, having no connection with any supply house, it can be done only by securing a large number of prompt-paying subscribers.

In conclusion, permit me to congratulate you that the ARCHIVES has been transferred to such an eminent and responsible association of dentists.

Wishing my successors abundant success and your continued support and co-operation, and again thanking subscribers, editors and correspondents, with best wishes to all, I remain,

Yours truly, J. H. CHAMBERS.

CLOSE OF THE VOLUME.

With the present issue our contract with Mr. Chambers, to do the Editorial work of the ARCHIVES for one year, is completed. How well we have performed this duty, whether we have been successful in our endeavors to make the ARCHIVES a readable, newsy, journal, must be left with our readers to decide.

Whatever measure of success is given in the verdict we feel should be shared by those who have so kindly and cordially aided us during the past year with their contributions and counsel.

With this issue, also, Mr. Chambers' connection with the journal ceases, he having disposed of his interests to an Association of Dentists, who propose continuing its publication in the interest of the profession. The editorial management will be the same as during the past year, with perhaps a few changes in the editorial corps.

The many flattering and encouraging letters received from correspondents and subscribers are very gratifying, and justify us in assuming that the plan adopted for the conduct of the journal has met with the approval of its readers, and, therefore, will be continued. The changes we propose making for the improvement of the journal, and necessitated by reason of change of ownership, we reserve for our next issue.

We return our thanks to those who have so kindly aided us in our work during the year by their contributions and counsel and solicit a continuance of these favors. ED.

EXCLUSIVELY editorial communications should be addressed to the Editor, 2602 Locust Sreet, St. Louis.

SUBSCRIPTIONS and all communications pertaining exclusively to this business should be addressed to Dr. William Conrad, Hotel Beers, St. Louis, Mo.

ALL communications pertaining to the Advertisement Department of the ARCHIVES should be addressed to Dr. John G. Harper, 516 Walnut Street, St. Louis, Mo.

ALL communications in reference to moneys due for subscriptions and advertisements for 1887 and prior should be addressed to J. H. Chambers, 914 Locust Street, St. Louis, Mo.

MORE PAINLESS DENTISTRY.

In connection with "Painless Dentistry" published in the October ARCHIVES the writer says: "Perhaps it is only 'Western physicians' who can teach us the art." I have had a case recently which seems to confirm the suggestion.

On September 22 a gentleman living about one hundred miles distant, called to consult about an aching jaw—the teeth had ceased to ache as he said—I found a cavity in the distal surface of the right inferior first molar, and also noticed a piece of tartar, as I thought, on the lingual side between the first and second molars. When I tried to remove it I found it loose, but attached between the teeth. It was removed and proved to be a piece of necrosed alveolar process a half inch long. The patient did not remember of receiving any injury about the jaw or teeth—so I wondered if it came from arsenical poisoning, but did not think anyone would be so careless in this respect. Upon further inquiry he said that a physician had killed the nerve some weeks previous, and used cotton and a white powder and the medicine had eaten a hole in his cheek and gums between the teeth, but as the physician had used caustic and burned it over he supposed it was all right now. The cheek had healed with a small depression, but there was so much inflammation about the roots of the first molar, and no certainty of relief otherwise that I extracted it and found it quite a yellow color, some distance down the distal root. The second molar was very yellow also, but otherwise so good it was left in position.

It is evident that we need painless dentistry, and no doubt

our patients would appreciate our efforts in this direction, but the question is, how much of Western physicians' light do we need to perfect us? W. E. BURKHART.

AMBIDEXTERITY.

A dentist who is ambidextrous, certainly possesses an advantage well worth cultivating.

It helps to preserve a symmetrical body. It is restful to be able to change the position from one side of the chair to the other, or the instrument from one hand to the other.

I nearly always stand at the right side of the chair to operate upon teeth of the right side of the mouth, and upon the left side of the patient in operating upon the left side of the mouth.

One can often get a view of the cavity from one side of the patient which would be impossible from the opposite side.

I have often changed my mind as to the perfectness of my work, when viewed from an opposite direction.

I should say, that the most important of these advantages is the ability to use the instrument with equal facility in either hand, though being able to stand at either side of the chair yields a rich return for the effort made. G. F. E.

CORRECTION NOTICE.

EDITOR ARCHIVES.—In the November number of your journal in my article on "Aluminum" I would respectfully call your attention to the spelling of the word. In the heading it should have been spelled with only one *i* and the ending *ium* should have appeared only in the first paragraph where it was used as in the chemists' nomenclature. H. L. MCKELLOPS.

St. Louis, Nov: 25, 1887.

The error complained of by our correspondent was the fault of the printer in not correcting proof as indicated. [ED.]

SELECTION.

A METHOD OF CASTING ALUMINUM PLATES.

The impression is taken in the ordinary manner, with plaster or wax. If an air-chamber be desired, the form of it is cut in the face of the impression. The model is made of plaster and French chalk, equal parts; fine white sand may be used instead of the chalk, but is not so good. The model should be about one and one-half inches thick, and of such form as to draw readily from a plaster mold to be formed around it. While the model is yet soft, a small eyelet made from ordinary wire, should be set in the centre of the back, opposite the face. It should be completely buried in the substance of the model, so that it will be no more than flush with the surface when the model is trimmed. In trimming, cut away from around the eyelet a little, so that you can grasp it with a pair of pliers; the object of this eyelet being to aid in the removal of the model from the flask. Grind the teeth, and articulate them as for rubber; place them in position with the trial-plate on the model. The trial or model plate should be made of sheet tin, lead or wax. If wax be used, it should not be thicker than No. 20 gold plate. There should be no surplus wax, except at a point just back of the tooth or teeth. The trial-plate may pass up underneath the gum of a single tooth, but in no case should a particle of wax overlap the gum or edges of the teeth. When the case is ready for the flask, the plaster teeth, if there be any on the model, should be trimmed off, and if there be any under-cuts that would interfere with the removal of the model from the mold in the flask, these should be filled up, or better, cut out. The sides and other exposed surfaces of the model are now to be covered with tin-foil, to prevent the

plaster adhering to it in flasking. Varnish should never be used for this purpose in the process. The foil is made to adhere by moistening the surface with saliva. It should not cover any portion of the artificial teeth. The flask consists of an ordinary cast-iron sand-ring, about two or two and a half inches in depth, of the form of the letter D, one end larger than the other. They may be had at any of the dental depots in nests of four sizes. A bottom is formed, of Russia sheet-iron, to fit into the small end as follows: A piece is cut the shape of the end to be fitted, but half-an-inch larger. Slit the edge all round to the depth of half-an-inch and turn it up at right angles with the surface; this turned-up edge passes up into the flask and retains the bottom when the case is flasked. A hole one inch in diameter, of the form of the bottom, should be cut from the centre. To flask the case, place the model, face upwards, on a marble slab or piece of glass; several pices of fine wire, about two inches in length, should now be set in the surface of the trial plate at right angles with it. If the case be one of two or more teeth, one tooth in a place, a wire should be set into the wax immediately back of each tooth. One wire will be sufficient for a block of three teeth; two or three wires should be distributed over the surface of the plate. The object of the wires is to form outlets for the escape of the oxygen which is forced out of the metal, when the flask is closed under pressure. Place the ring or flask small end upwards around the model. Mix an investment of equal parts of plaster and French chalk, or white sand, to about the consistency of thick cream; fill round the model in the ring; carefully allowing no air-bubbles to be retained. When the flask is full, place the bottom in position, letting the wires pass through the hole in the centre; be particular to have the bottom flush with the edge of the flask. When the investment is hard, remove the wires by drawing them out, warm the case slightly, (not enough to melt the wax), grasp the eyelet in the model with a pair of pliers, and tap the edge of the ring gently until the model is loosened, it can then readily be withdrawn. Remove the trial-plate and every particle of wax

and tin from the mold and the model; cut small outlets in the sides of the model for surplus metal; with a small unannealed broach make three or four vents near the centre of the model by passing the broach through from the back to the surface. The model and mold should now be thoroughly dried; this may be done by placing them separately over a gas-stove or in an oven. When dry put them together, place the case in a charcoal fire; heat up gradually to red heat. Having previously prepared the metal by casting it into an ingot, in size sufficient for the case, melt it in an ordinary crucible; when melted, and the case is red hot, take the case from the fire, remove the model from the mold by means of the eyelet and a pair of long-nosed pliers, blow out the ashes and dust that may have fallen into the mold, and pour in the metal; return the model, place the case in an ordinary rubber press and force the model down slowly, till flush with the top of the ring; let it stand till cold. The case can now be taken from the flask and finished. To do this, first saw off all the surplus metal round the edges, dress down the surface with burrs and scrapers, and finish the same as rubber, except the polishing which is best done with the burnisher. * * * —EAMES in *Missouri Dental Journal*, Vol. III., page 26.

“An’ when the leddies get degrees,
 Depen’ upon ’t there’s nocht, ll please
 Till they hae got oor chairs an’ fees,
 An’ there’s an en’ o’ you an’ me.

For a’ that ken the woman craiter
 Maun own it is her foremost faitur
 To tak’ to lecturin’ by natur’;
 An’ hoo she’ll do it ye sund’ll see.”

—*Pharmaceutical Journal*.

DR. GEORGE S. STAPLES, Sherman, Texas, claims that more than 95 per cent of the failures in fillings were due to the lack of thoroughness. A word to the wise is sufficient.

BRIEF MENTION.

TO MAKE a Roman punch call him a liar.

A MERRY heart doth good like a medicine. SOLOMON.

A WESTERN editor having found a "mare's nest" is now on a hunt for a nigger in the wood pile.

GALLIUM is now ranked as the most costly of the metals, its value being double that of the purest diamonds.

VOLKMANN'S antiseptic liquid is composed of thymol 1 part, alcohol 10 parts, glycerin 20 parts, water 100 parts.

ACCORDING to Prof. Leeds, water which has been purified by alum, $\frac{1}{2}$ grain to the gallon, is almost completely free from bacteria, even though previously swarming with them.

METHODS OF USING IODOFORM.—Eighty parts of iodoform, fifteen parts oil cinnamon and five parts finely powdered ground coffee, packed into a fowl root, will disinfect it, and also prove a very agreeable dressing.

THE BRITONS.—When their island was first visited by Cæsar were either naked and their bodies fancifully painted, or clad in the skins of animals. Cæsar first landed on the coast of Britain in the year 55, B. C.—*Medical Classics*.

THE "ART OF WASHING HANDS" is thus described in the *Brit. Med. Journal*. To insure absolute surgical cleanliness of the hands they must first be carefully washed with potash soap

and water as hot as can be borne, and then with a five-per cent. solution of carbolic acid or one-per-mille solution of corrosive sublimate or chlorine water. The dental surgeon will do well to remember this precaution. C.

CONVULSIONS may be frequently cut short like magic by turning the patient on his left side. Nausea, occurring as an after-effect of chloroform and ether narcosis, may generally be controlled in the same manner.—*Chicago Med. Times.—Medical Record.*

THE *Jeweler's Journal* says: "If 2% of silica be added to gold it can be melted over the flame of a common candle." This is not generally known, and it is well it is not, for sovereigns, as a rule, melt faster than their possessors desire.—*Dental Record.*

PERCENTAGE.—There seems to be a diversity of opinion regarding percentage. As we understand it a percent means one in a hundred. Practically, we call an ounce (480 grains) 500 grains, that is 5 grains of carbolic acid added to an ounce of water is called a one per cent. solution, etc.

BORIC acid may be dissolved in five times its weight of water by the intervention of a little magnesia. The proportions are magnesia usta 2 parts, boric acid 31 parts, water 150 parts. The solution has the antiseptic properties of Dr. Oppermann's "anti fungin."—F. CHLOEZ in *Pharm. Post.* 29.

THE PAIN OF INSECT STINGS, according to Dr. Bernbeck, is best relieved by applying flexible collodion containing 35 grains to the fluid ounce of salicylic acid, or one-third of one grain to the ounce of corrosive sublimate. Pain is quickly relieved and swelling of the part generally prevented.

THE INFLAMMATION excited by the presence of bacteria often results in a great aggregation of living cells in the tissue affected. These may so act as to repel the continued ad-

vance of the fungi, which straightway perish, and the affection issues in healing and cicatrization. The fixed tissue-cells of the region may likewise act so as to check the development of the bacteria, and may further suffice to make up any loss of tissue by their regenerative activity. If this does not happen the bacterial invasion continues to advance.—ZIEGLER.

TOBACCO.—Quaint old Burton, *Anatomy of Melancholy*, published 1621 (II, 109), says: "Tobacco, divine, rare, super-excellent tobacco which goes far beyond all their panaceas, portable gold, and philosopher's stones, a sovereign to all diseases. A good vomit, I confess, a virtuous herb, if it be well qualified, opportunely taken, and medicinally used; but as it is commonly abused by most men, which take it as tinkers do ale, 'tis a plague, a mischief, a violent purger of goods, lands, health, hellish, devilish, and damned tobacco, the ruin and overthrow of body and soul."—*Medical Classics*.

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FLIES AS CARRIERS OF CONTAGION.—It has long been asserted that yellow fever is sometimes spread by mosquitoes, which take the poison from one person and inject it into another. Some recent experiments in the French Academy of Sciences tend to show that flies act similarly as carriers of contagion. The bacilli of consumption were found in abundance

in the excreta of flies which had fed upon the spit cups used by consumptive patients. Thus is fortified the recommendation that the sputa of consumptive patients be received in vessels containing disinfectants.

ETCHING GLASS OR METALS.—Geo. M. Hopkins, in the *Scientific American*, describes an extremely simple plan of engraving or etching glass, porcelain, metals, etc., which may sometimes come in play in the chemical laboratory. The principle is that of the sand blast. The article to be engraved is covered with good writing paper, in which the design has been cut out to form a stencil. The paper must be securely attached to the surface by means of mucilage, any gum pressed out at its edges being carefully removed with a moist sponge. The object is secured in the end of a suitable box (a cigar box answers well); into this is put about a pound of rather coarse emery powder and a pound of shot; the box is securely closed, and is then shaken violently end-wise, causing the emery to rapidly abrade the surface unprotected by the paper. The details of the operation any person of ordinary ingenuity can arrange for himself, the principle being understood. It appears that the particles of emery embed themselves in the soft metal of the shot which thus becomes a sort of diamond drill in miniature.

THE ACTION OF BORIC ACID ON MICROBES.—The statement has been made that a saturated aqueous solution of boric acid made with distilled water has been found after a week to contain a fungoid growth. The writer filled four bottles each partially full of a saturated solution of the acid, and kept them nearly a year (conditions of temperature and exposure not stated), occasionally removing the stoppers to permit the entrance of germs. No microbes developed in any of the solutions. Into another solution of the acid, some of the fungoid

growth from an old solution of strychnine sulphate was introduced. After ten days the growth was found to be apparently enfeebled in its vitality, and had not increased perceptibly in amount. It has been recently shown that micro-organisms have a remarkable power of adaptability, so that conditions which ordinarily would be fatal to them may be tolerated if approached by gradations. The writer concludes from his experiments that boric acid is of unquestionable value as an antiseptic. It does not destroy germs, but it assuredly checks their power to multiply. Dr. Sternberg has shown that even a two per cent. solution will destroy the virulence of septicæmic blood, and wounds treated with boric acid produce healthy granulations and show no signs of putrefaction, although micrococci in abundance may be found in the pus.—R. C. ECCLÉS in *Pharmaceutical Era*.

LEARNING TO USE ARTIFICIAL TEETH.—Dr. Haskell, of Chicago, answers your New Brunswick man's question for information on the many causes which produce trouble in making plates fit, or stay in well. He describes the mouths well, but I think he should have gone on and described the *people* the mouths belong to, for instances: I would rather insert three sets for *three* women than one for *one* man. We ought to get three times the price for inserting a set for a man, that we do for a woman; then only under great pressure will I put in a set for a woman past seventy-five, and nothing would induce me to try it for a man. Again, take one who has been for years with only a few teeth; extract them, and insert a complete set, and if your patient is a man, he becomes at once a nuisance to his neighbors, and the horror of his poor, haunted dentist. I need not describe him further; the dentist who has been there will recognize the man once. With such people I start with—"yes, I'll put you in a set, but you are going to have a terribly hard time before you get used to them."

I think most dentists make a mistake in leading their pa-

tients to believe that their plate is going to hold in so tightly *by suction* that they will be able to eat with it. I am confident no one ever ate a morsel, depending on the suction of a plate to hold it in place during the operation.

A patient asks me, "Shall I be able to eat with this set."

"Yes—after you have learned how. You must remember that you have been without molars for a long time and the muscles of your cheeks and your tongue have forgotten the art of feeding the food to the teeth. Till they have re-learned the lesson of their youth, you cannot eat; furthermore, it is the muscles of the cheeks and lips that must learn to grip the teeth so firmly as to hold them in place while you are eating. This is very difficult at first, but finally becomes an involuntary act, and then your trouble ceases." No doubt, the worst thing for the dentist is for the patients to get it into their heads that the set is going to hold in so strongly by suction they will be able to eat by that agency alone. The sooner the dentist succeeds in knocking that notion out of the patient's head the better for both.—*Cor. Items of Interest.*

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Respectfully yours,

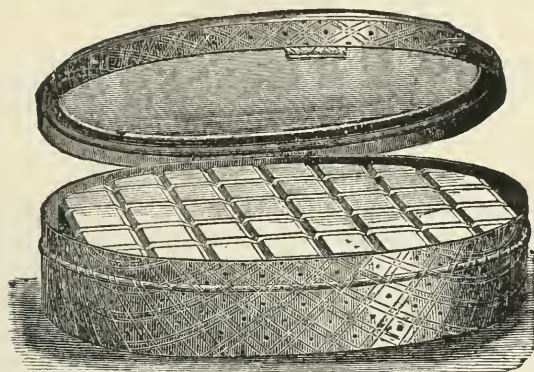
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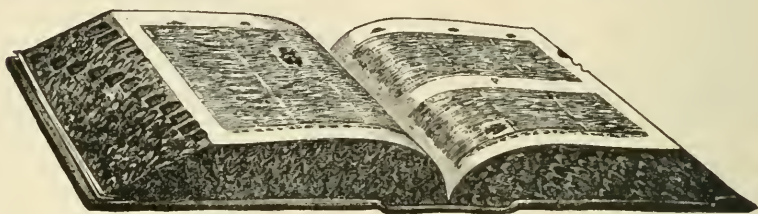
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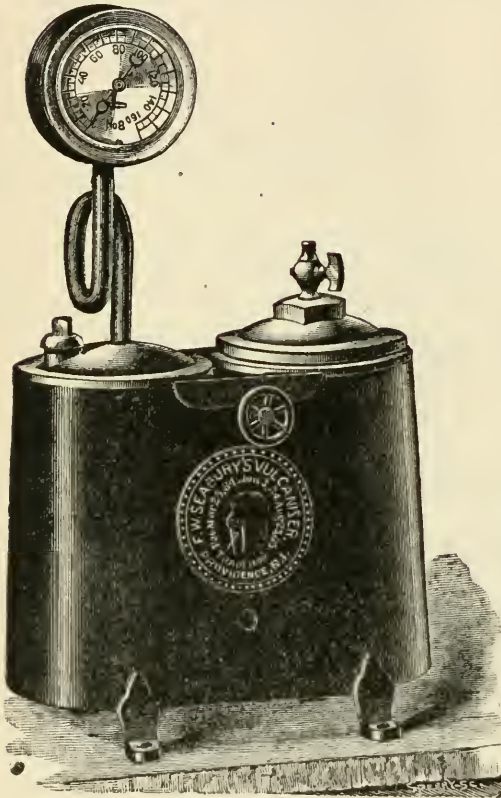
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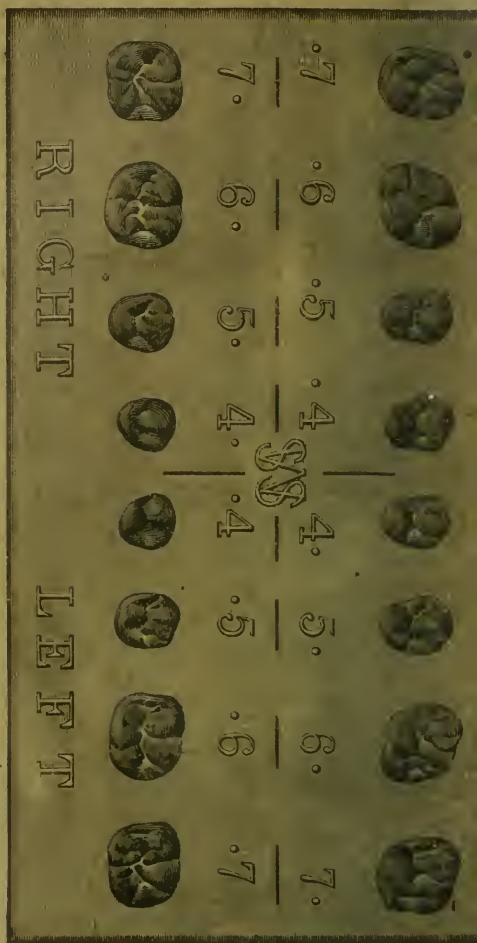
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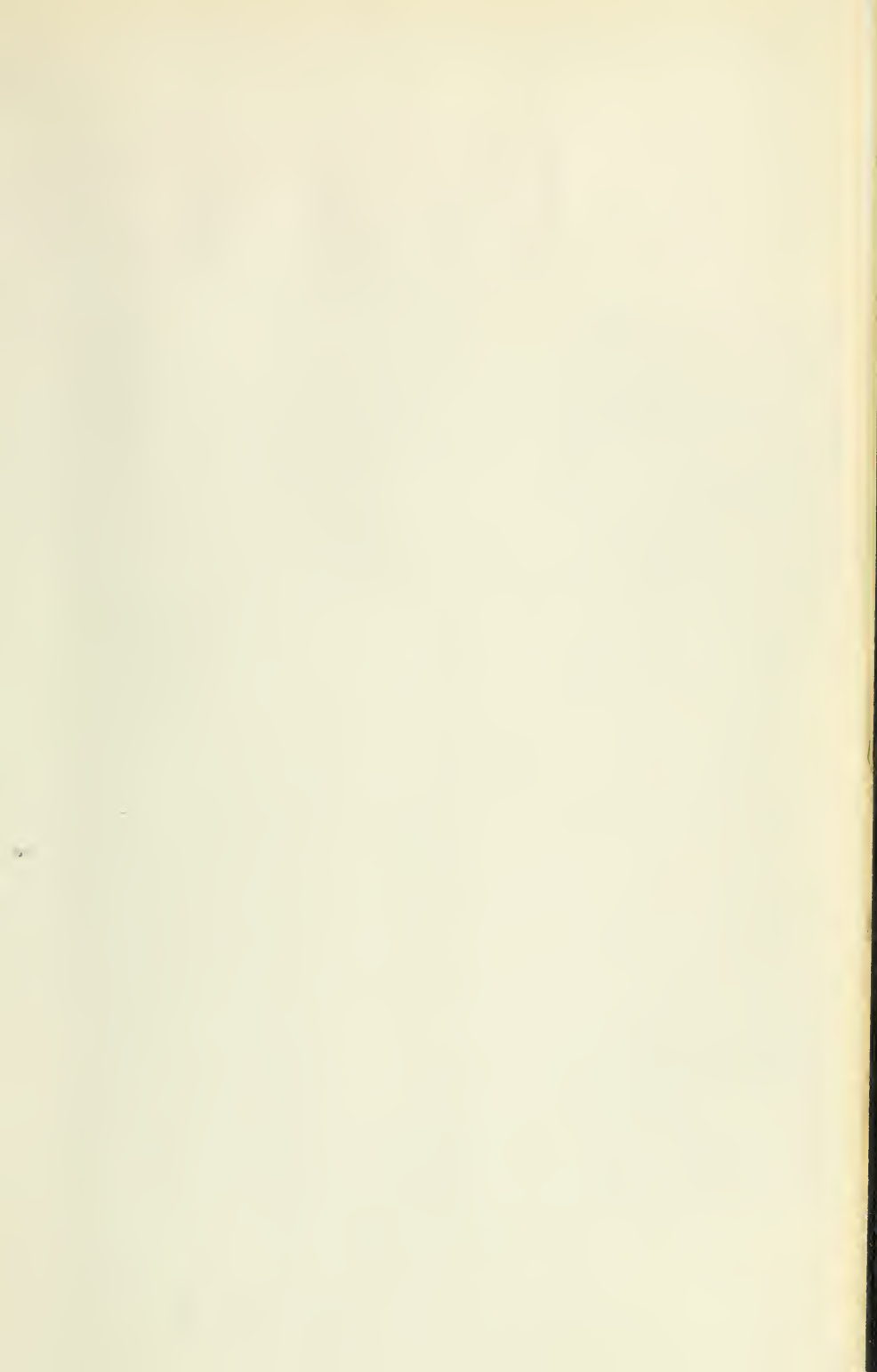
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